

FIG.1

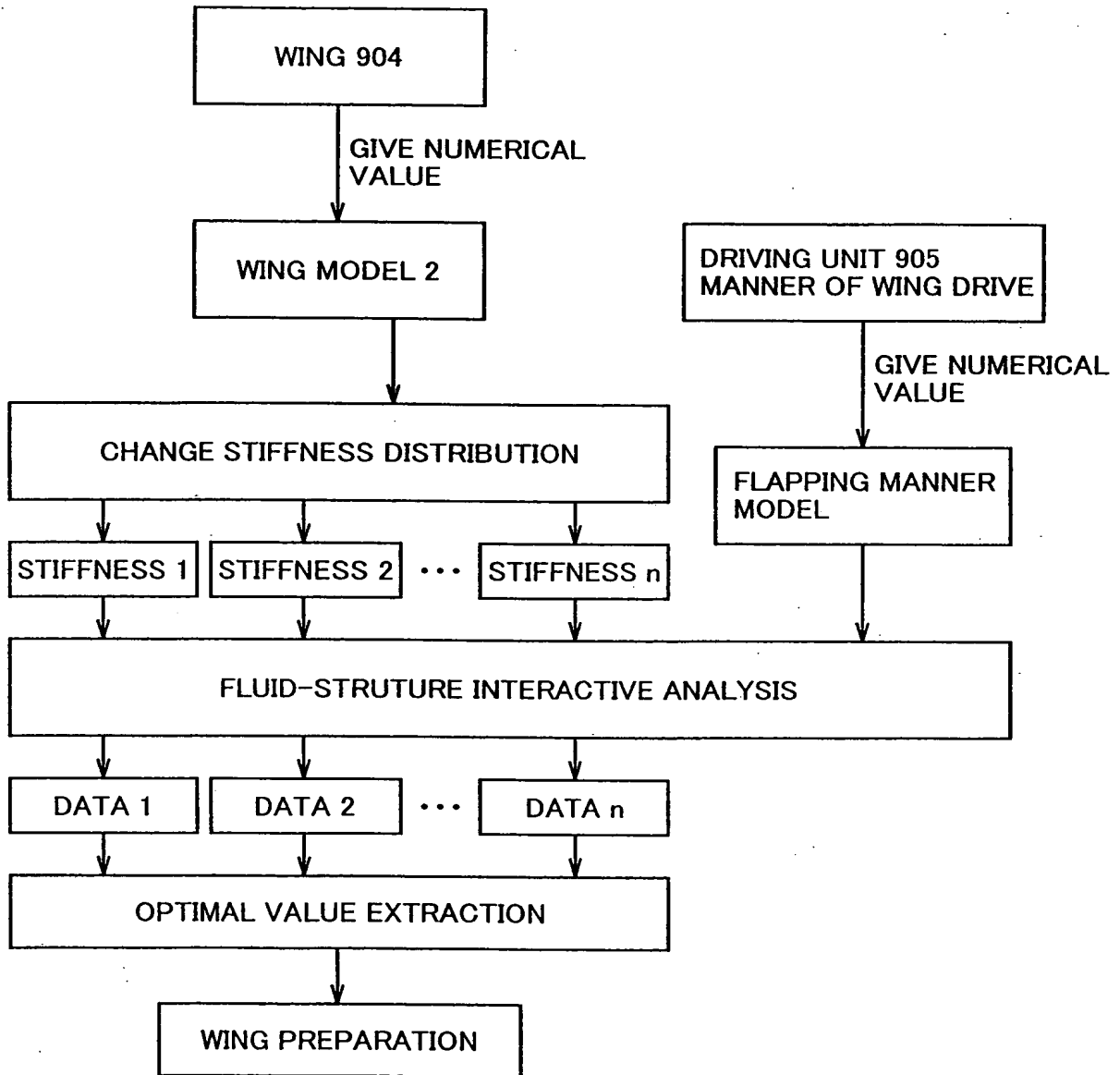


FIG.2

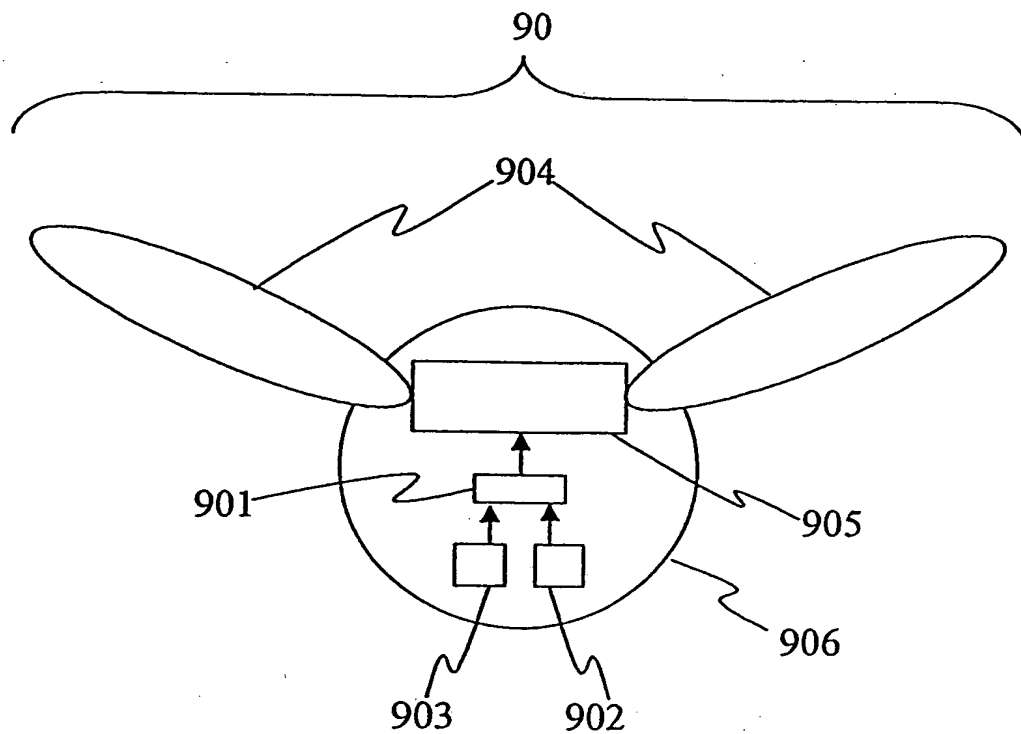


FIG.3

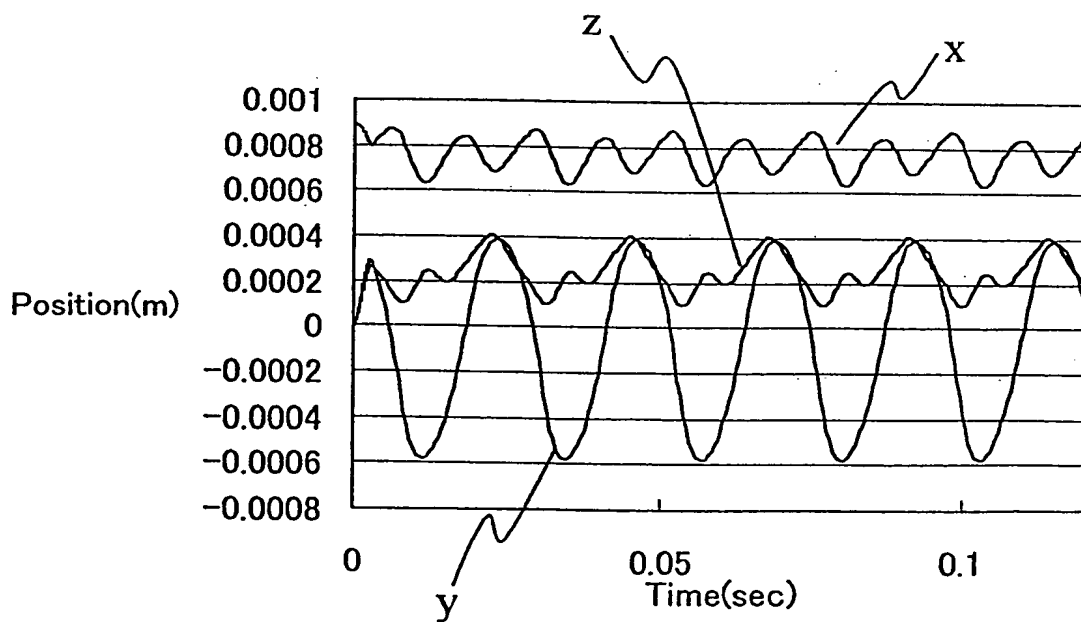


Figure 1 is a 3D perspective view of a curved, segmented structure, likely a prosthetic joint. The structure is composed of a grid of segments, each with a different hatching pattern. A coordinate system (x, y) is shown at the top left. Points P0, P1, P2, and P3 are marked on the structure. A legend below the structure maps hatching patterns to thickness values:

	0.045 mm
	0.012 mm
	0.010 mm
	0.008 mm
	0.006 mm
	0.004 mm

FIG.6

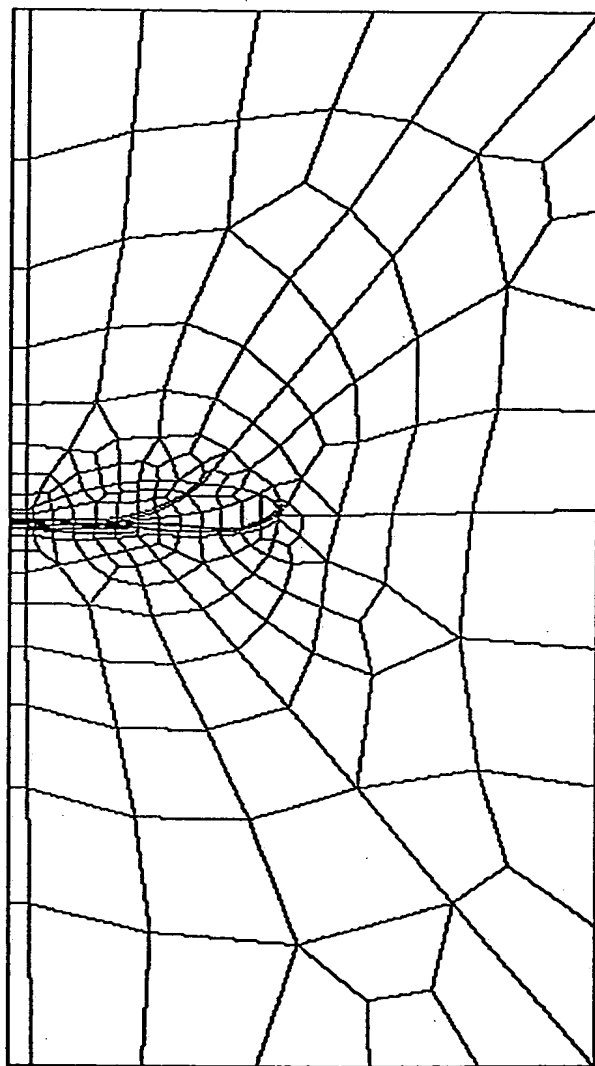


FIG.7

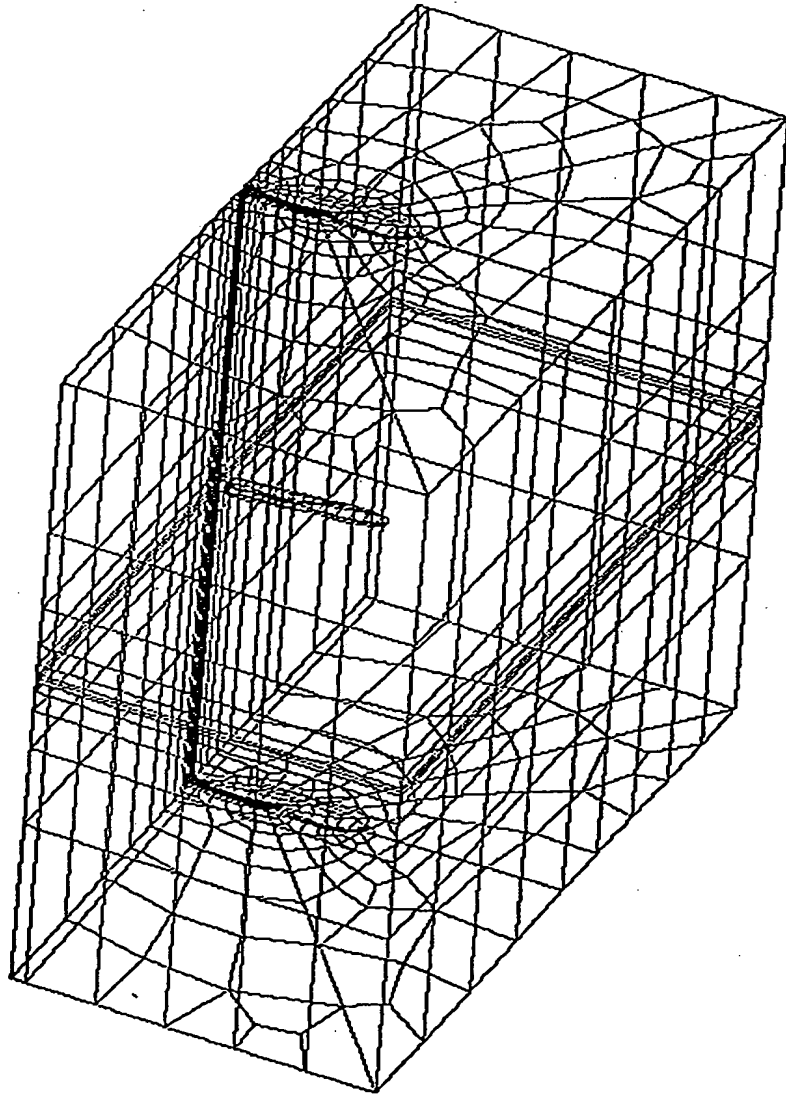


FIG.8

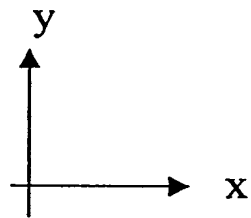
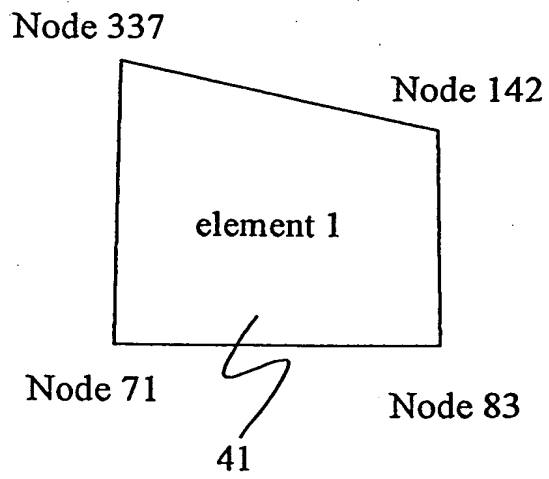


FIG.9

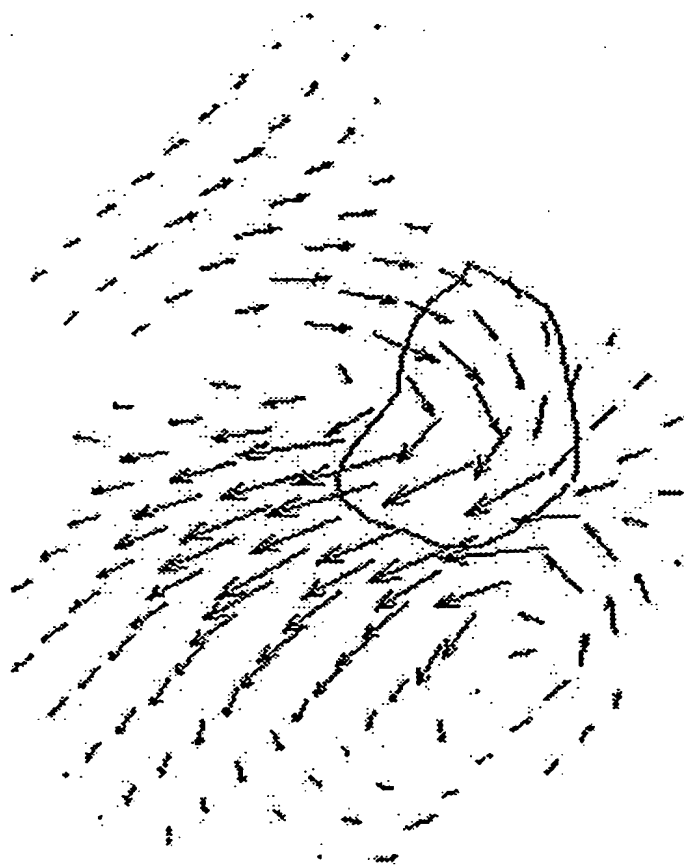


FIG.10

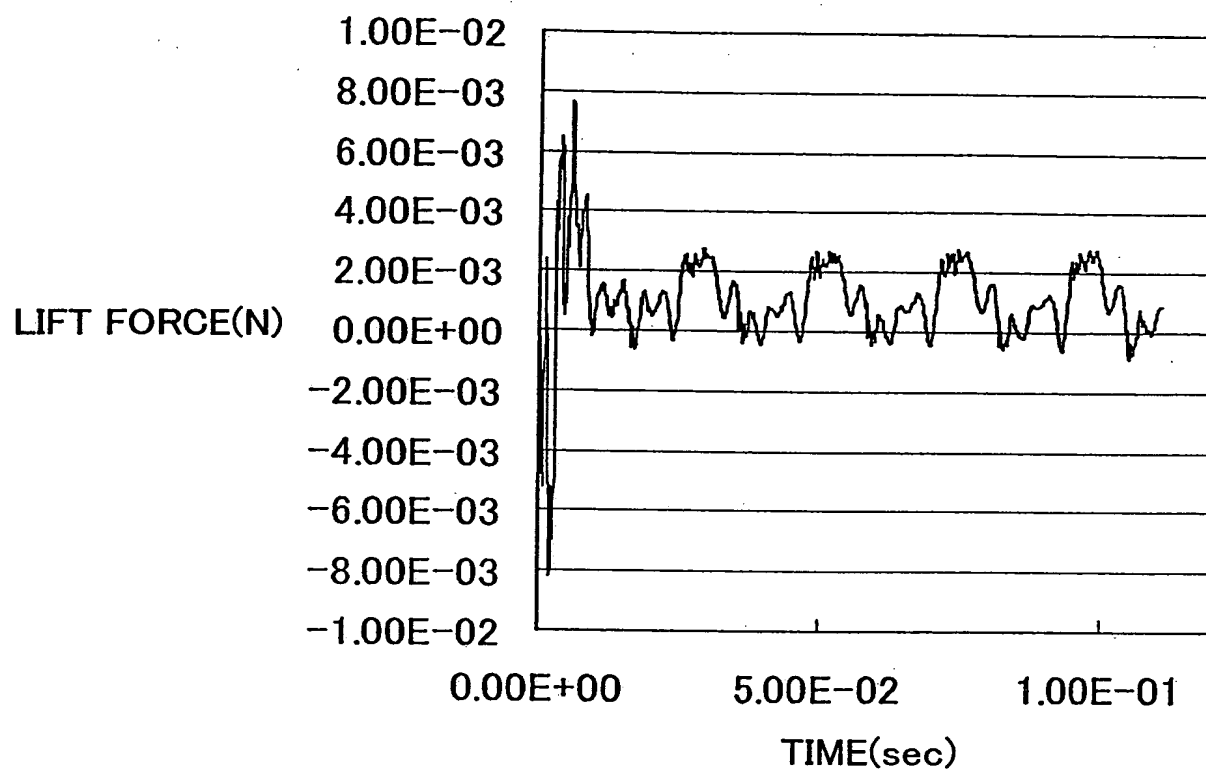


FIG.11

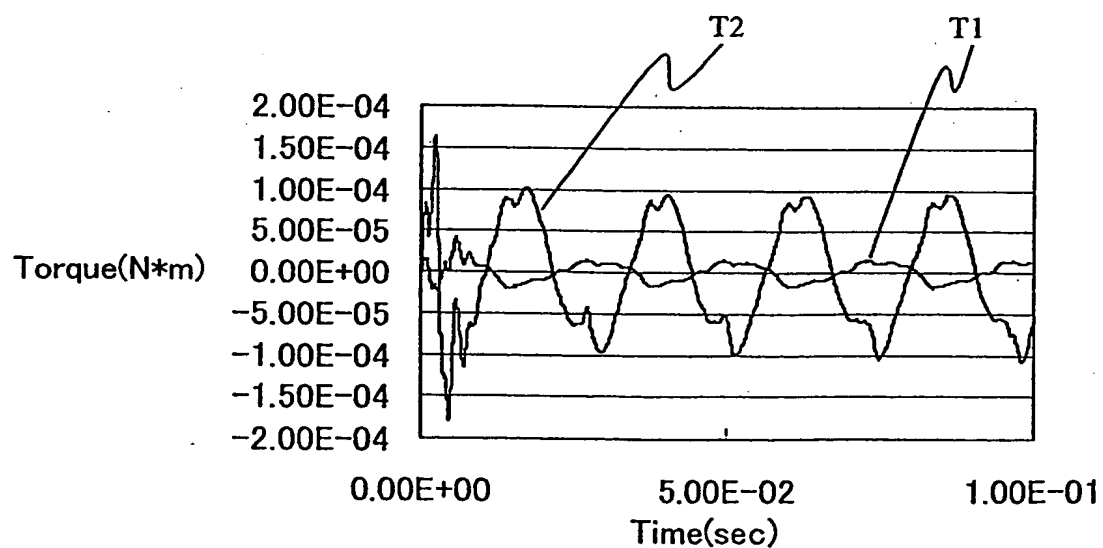


FIG.12

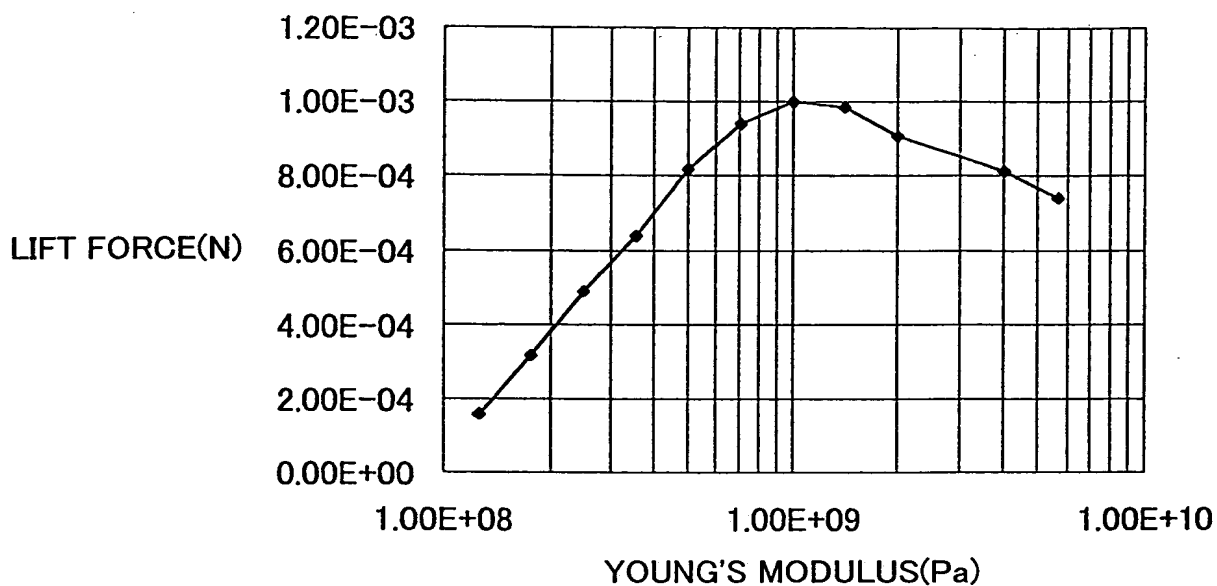


FIG.13

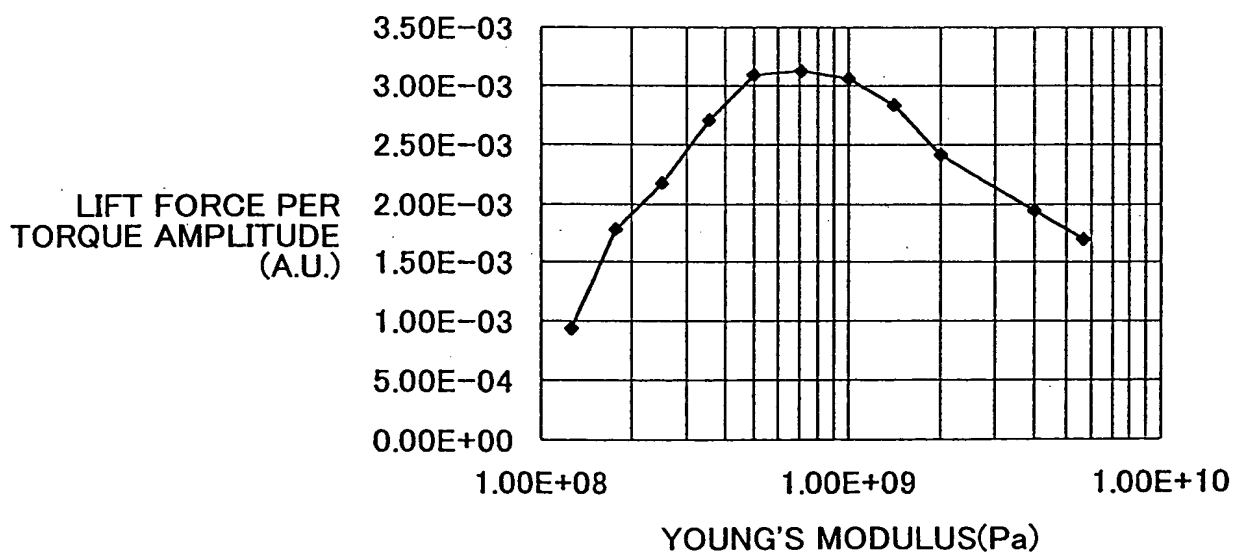


FIG.14

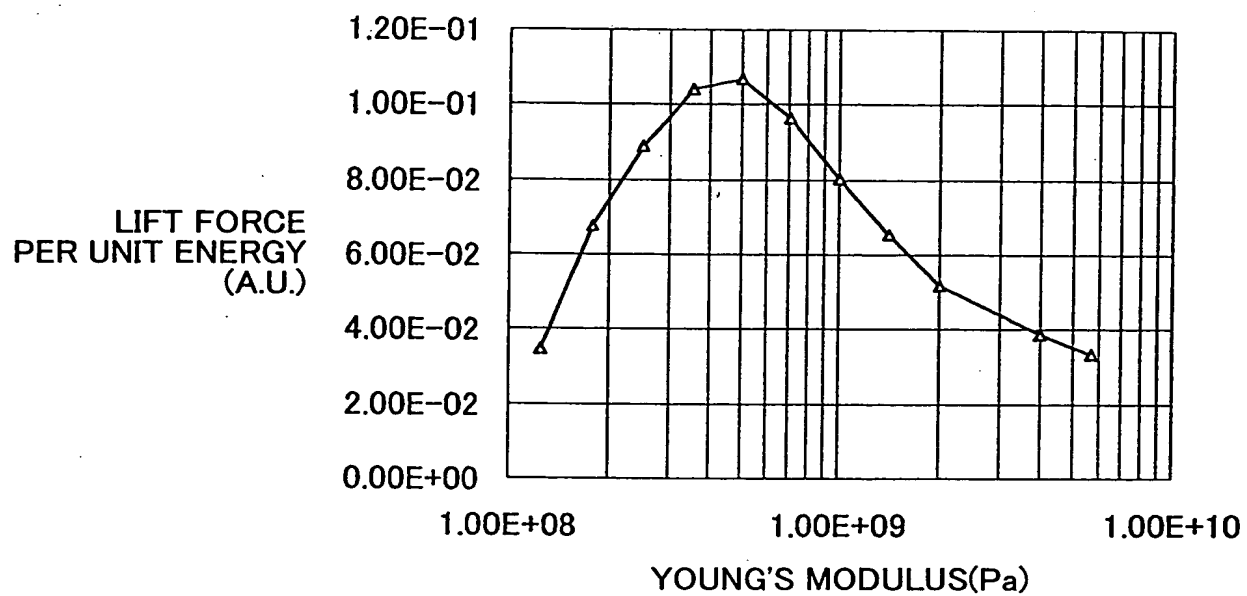


FIG.15

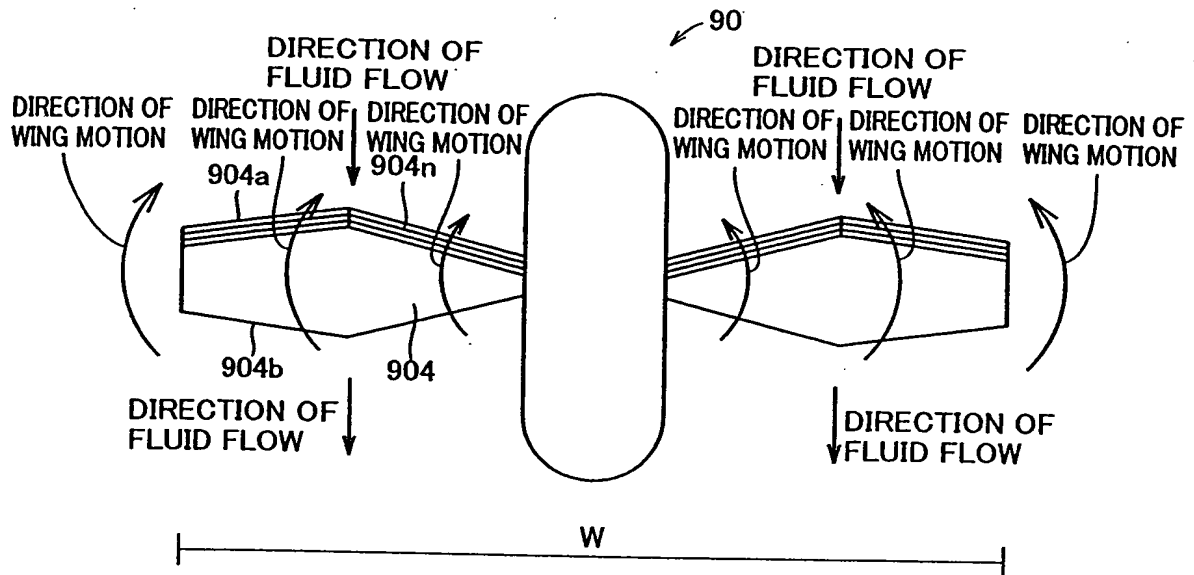


FIG.16

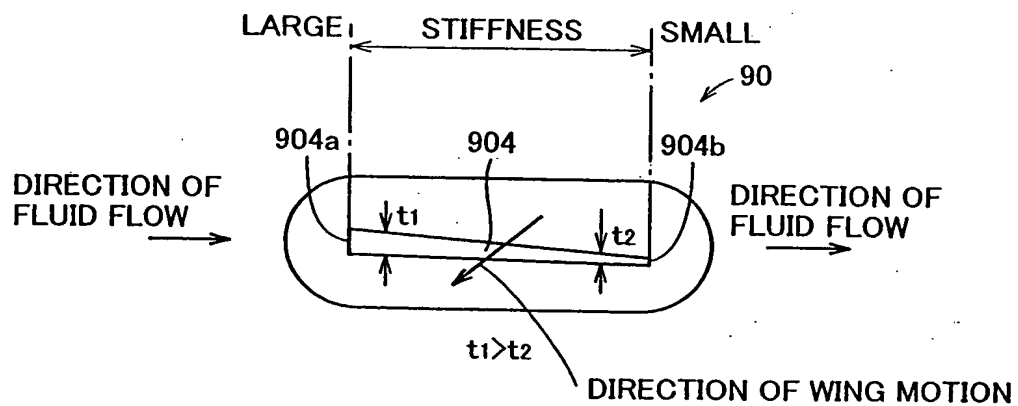


FIG.17

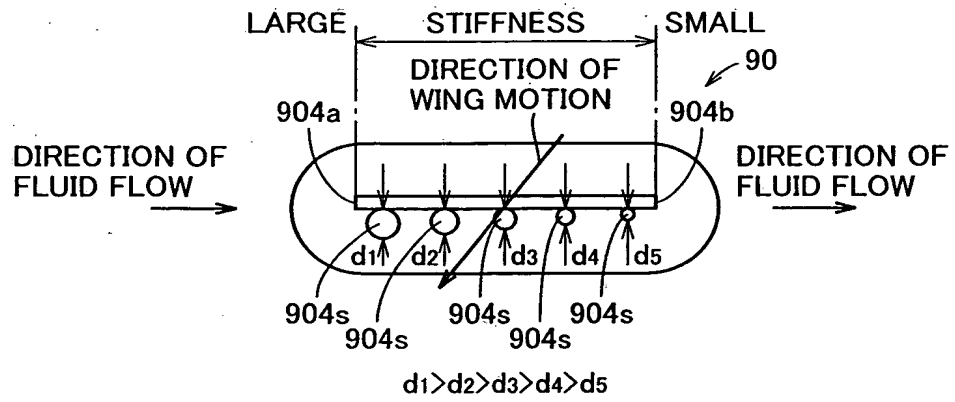


FIG.18

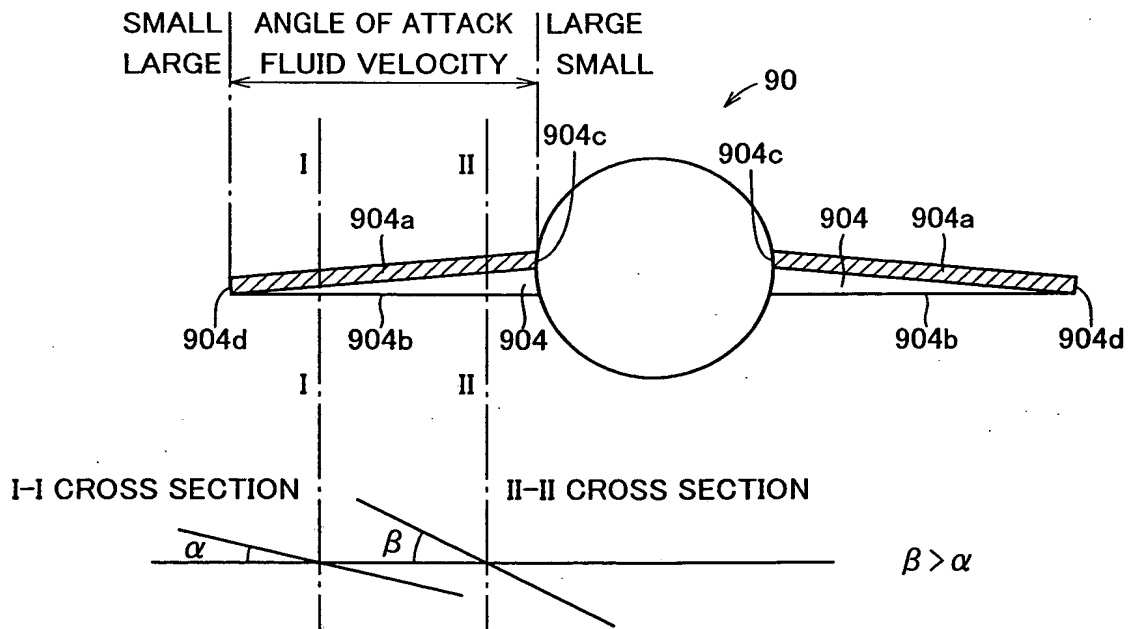


FIG.19

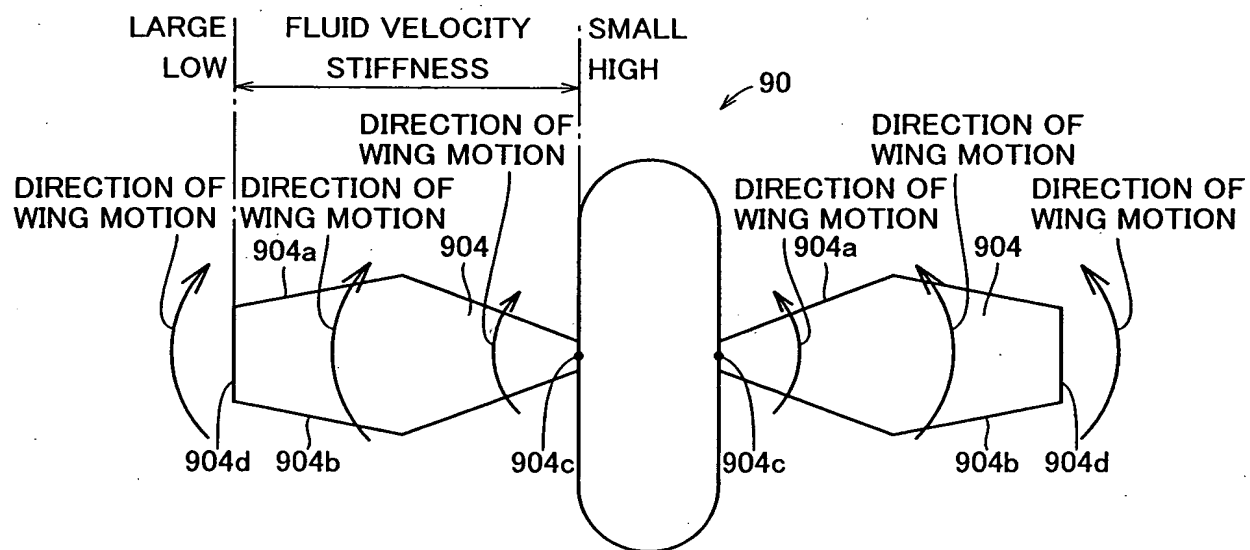


FIG.20

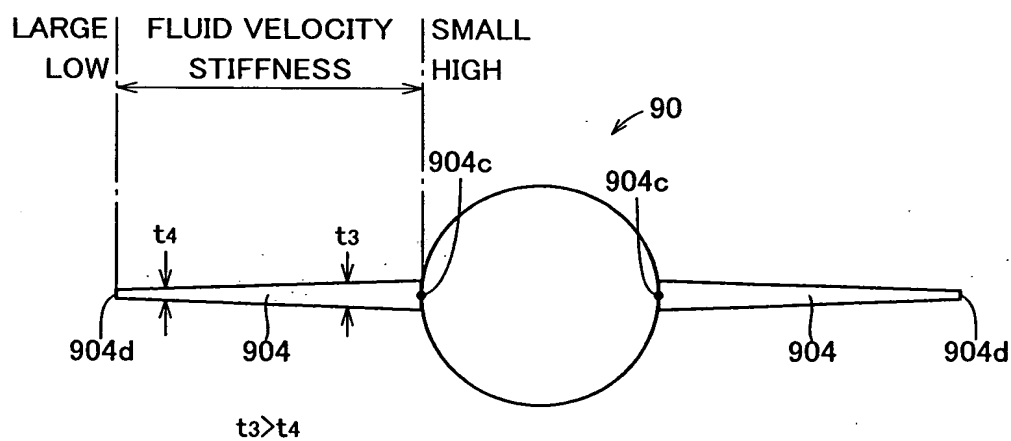


FIG.21

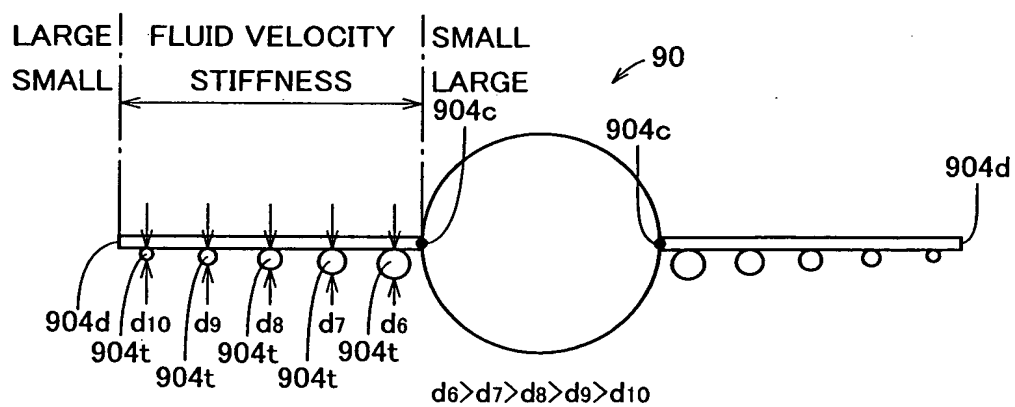


FIG.22

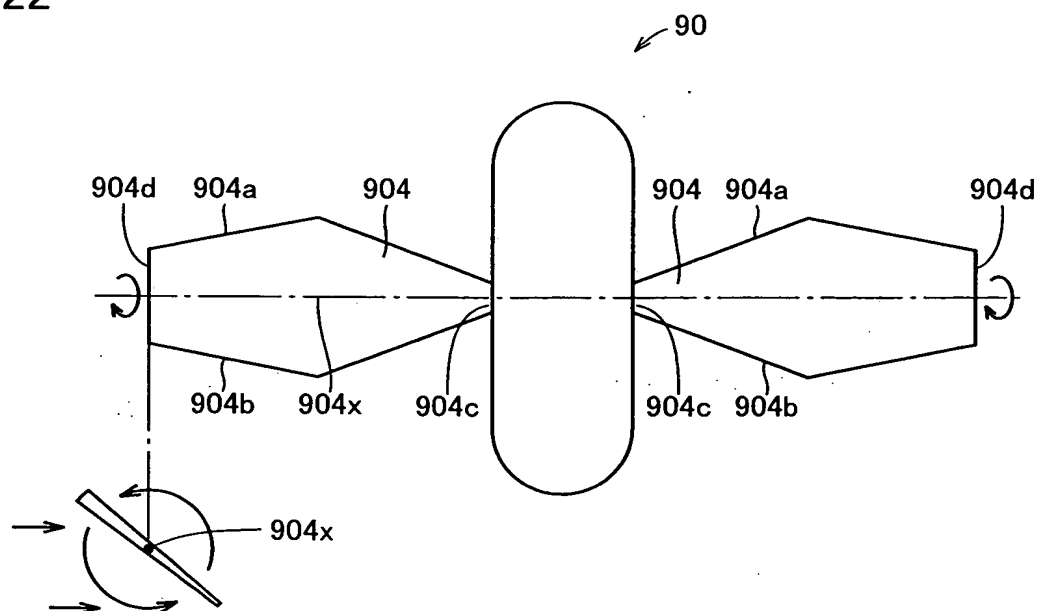


FIG.23

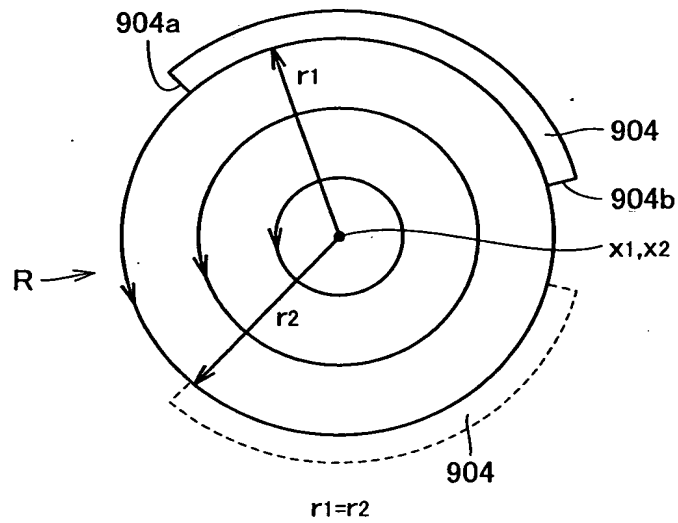


FIG.24

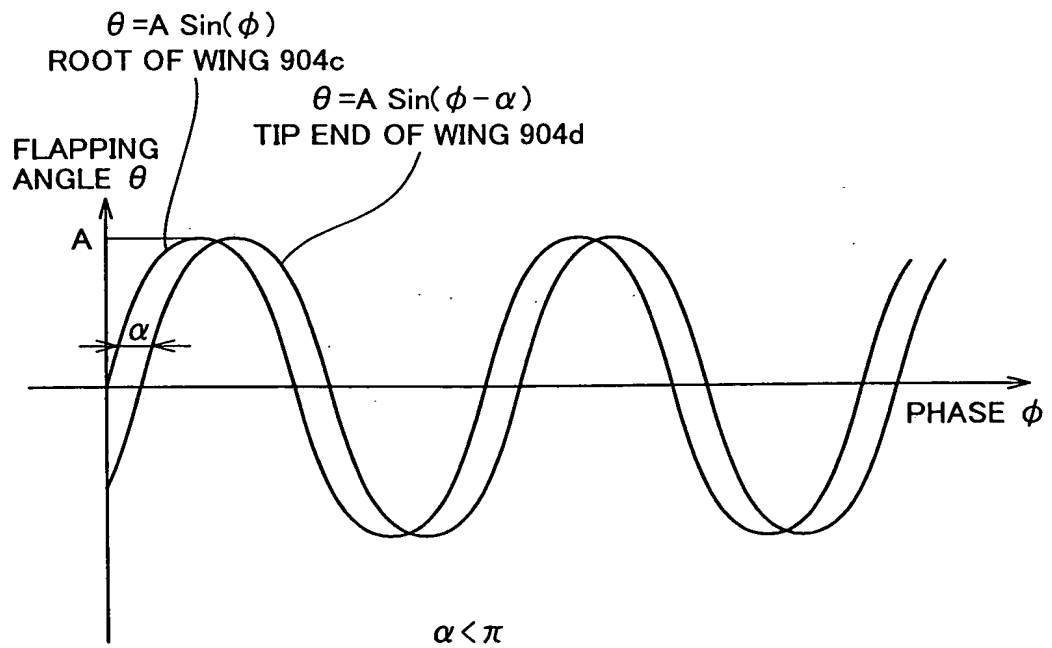


FIG.25

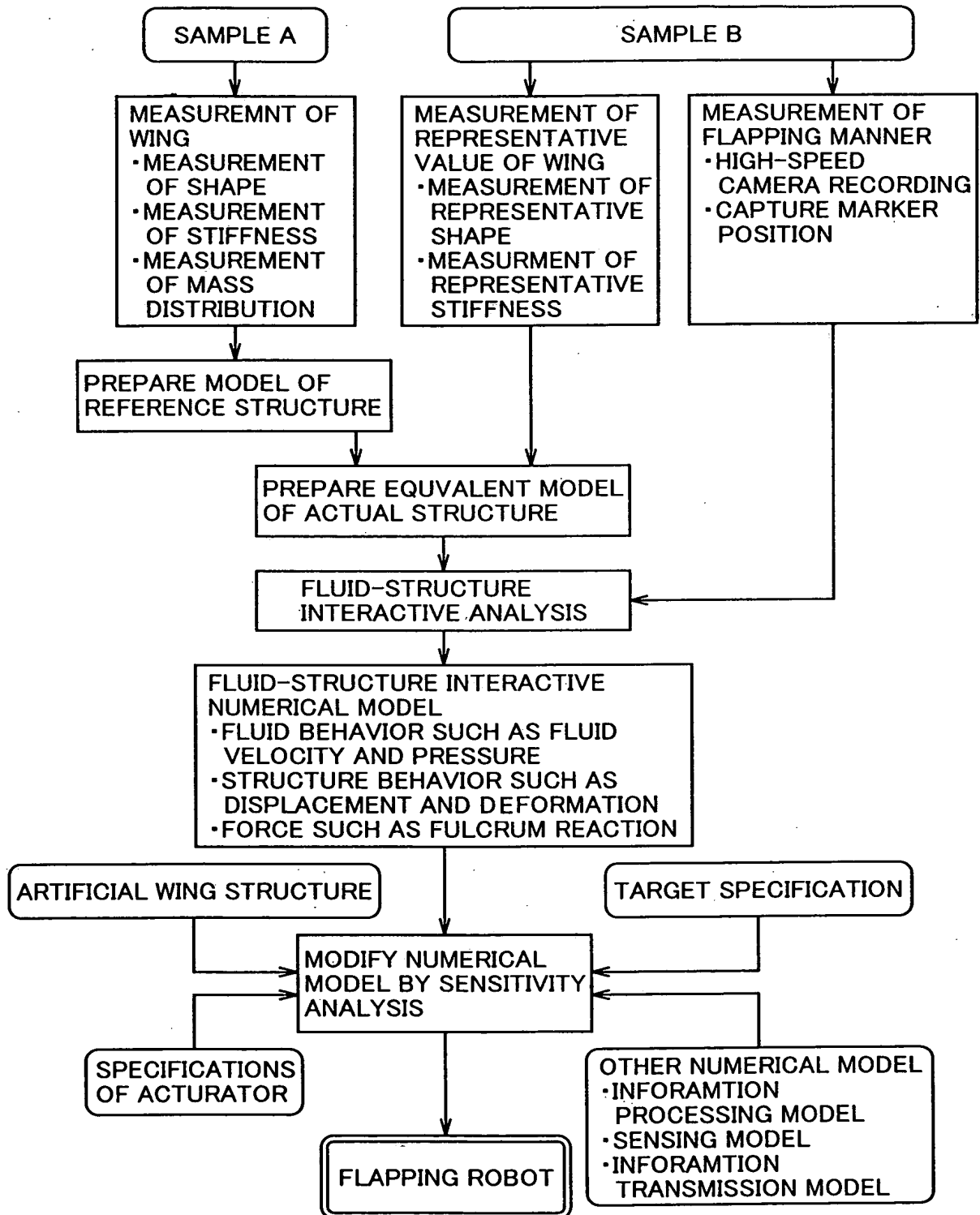


FIG.26

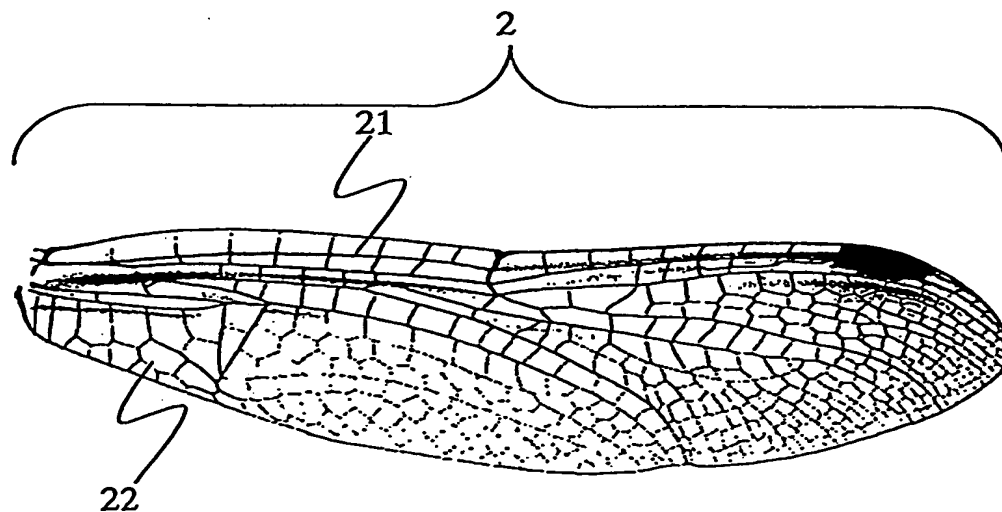


FIG.27

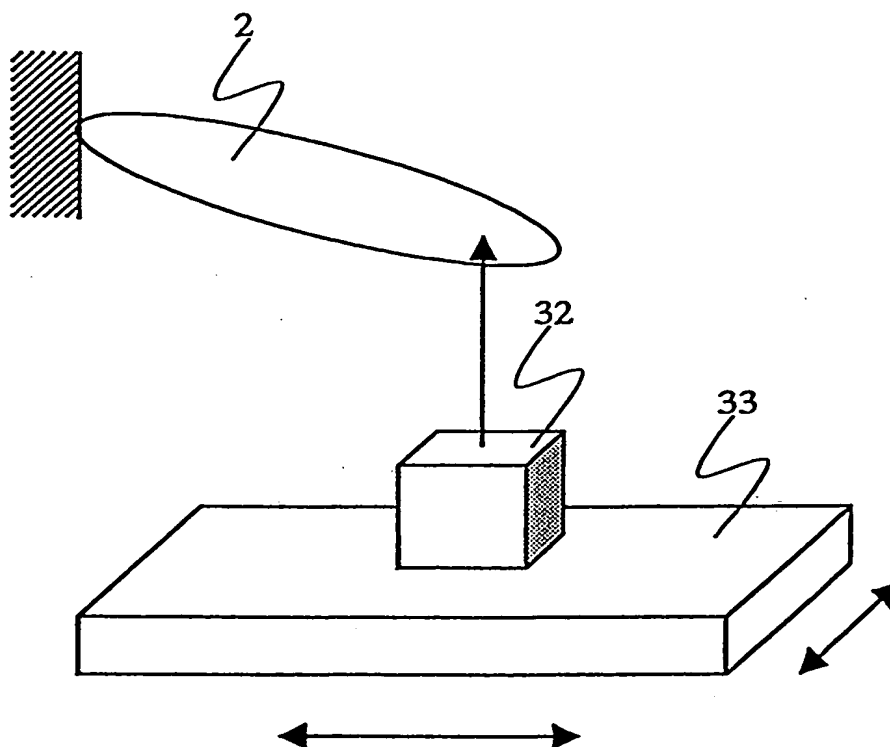


FIG.28

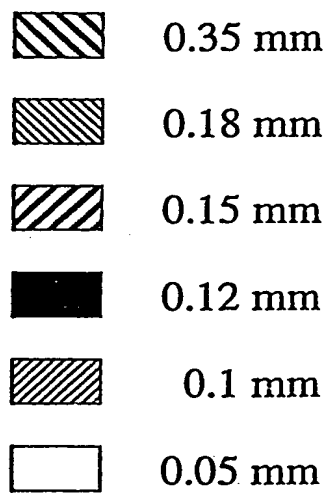
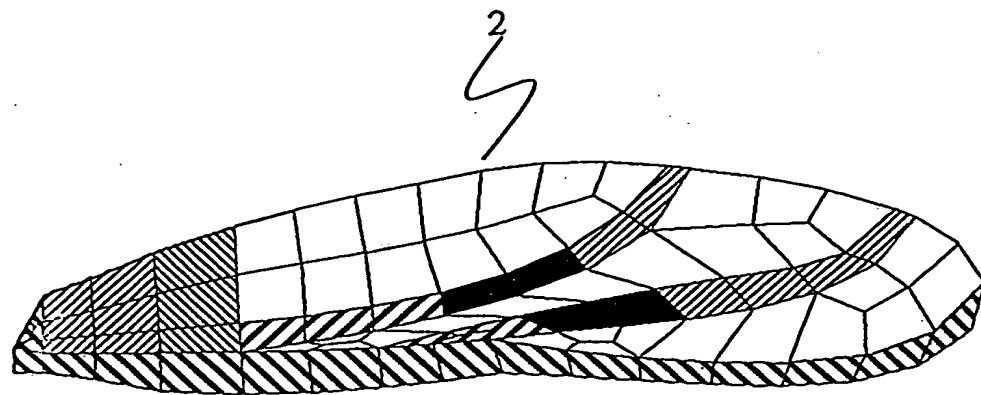


FIG.29

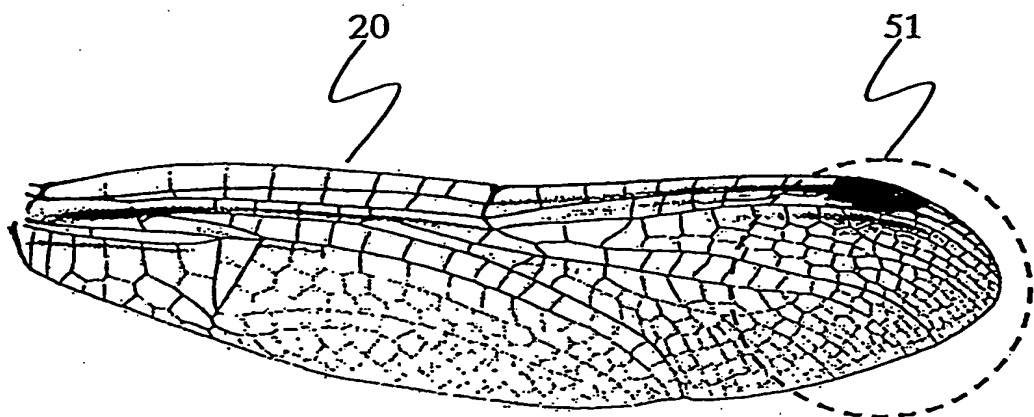


FIG.30

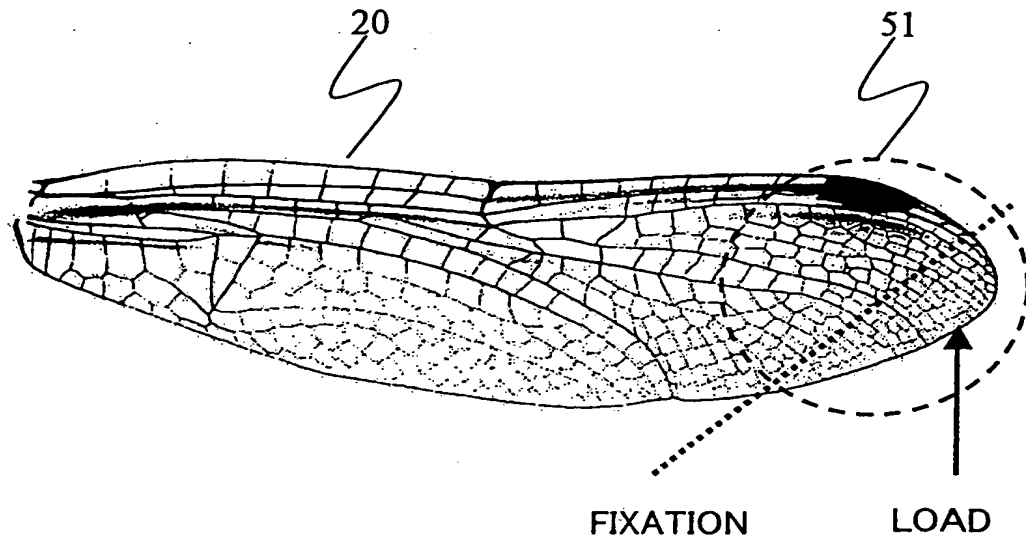


FIG.31

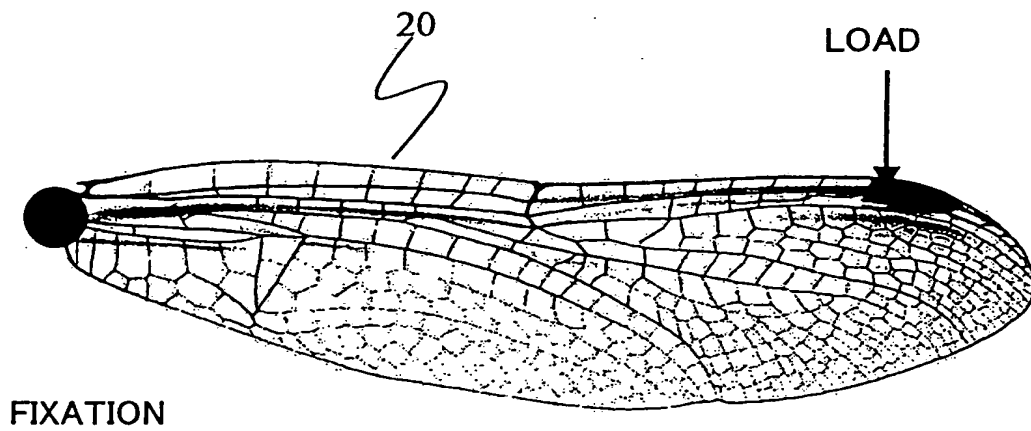


FIG.32

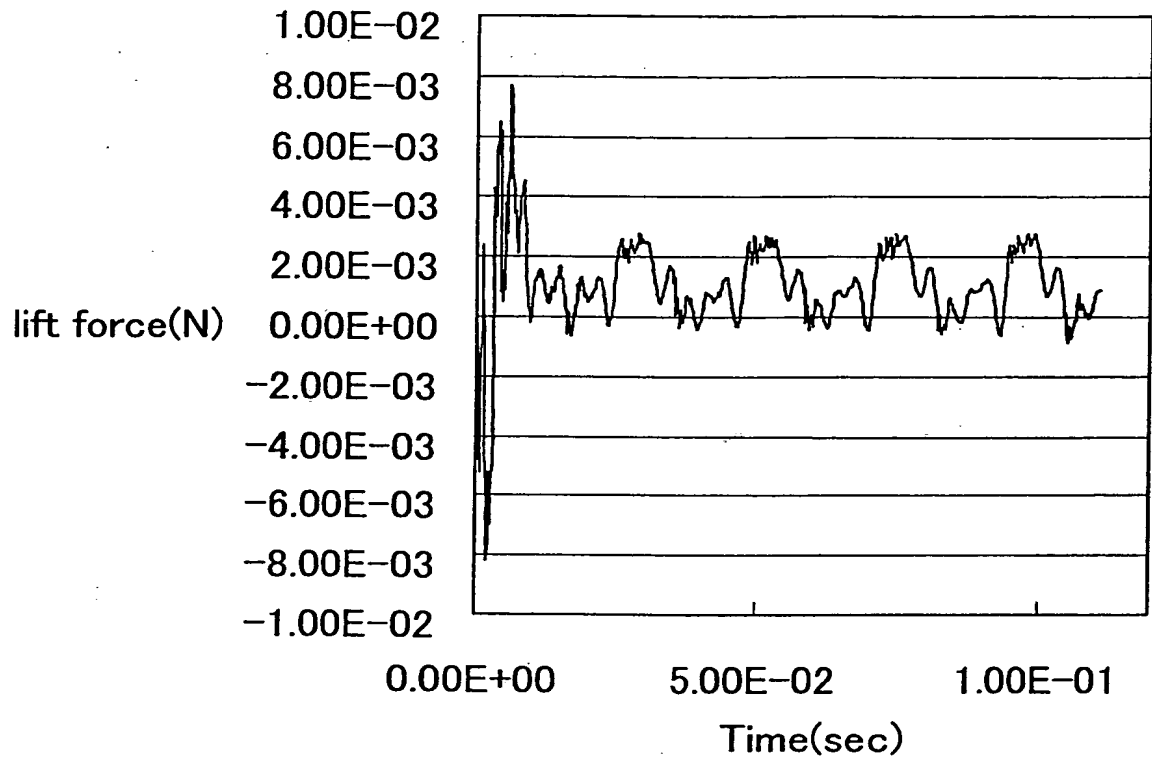


FIG.33

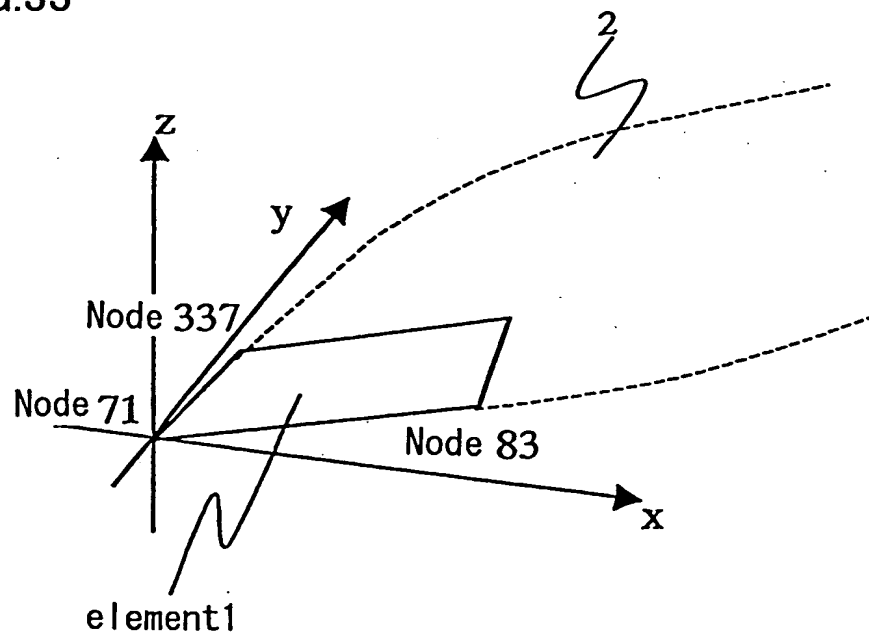


FIG.34

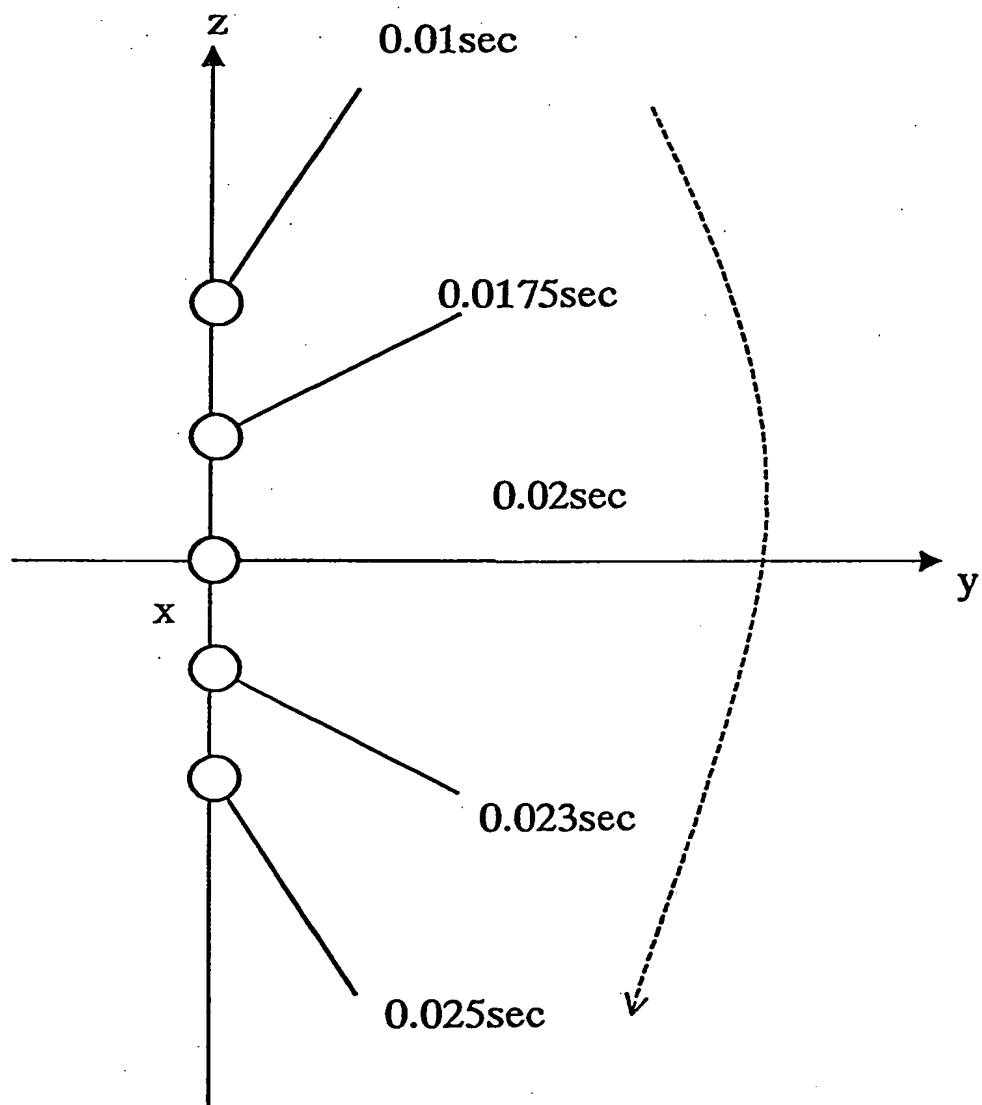


FIG.35

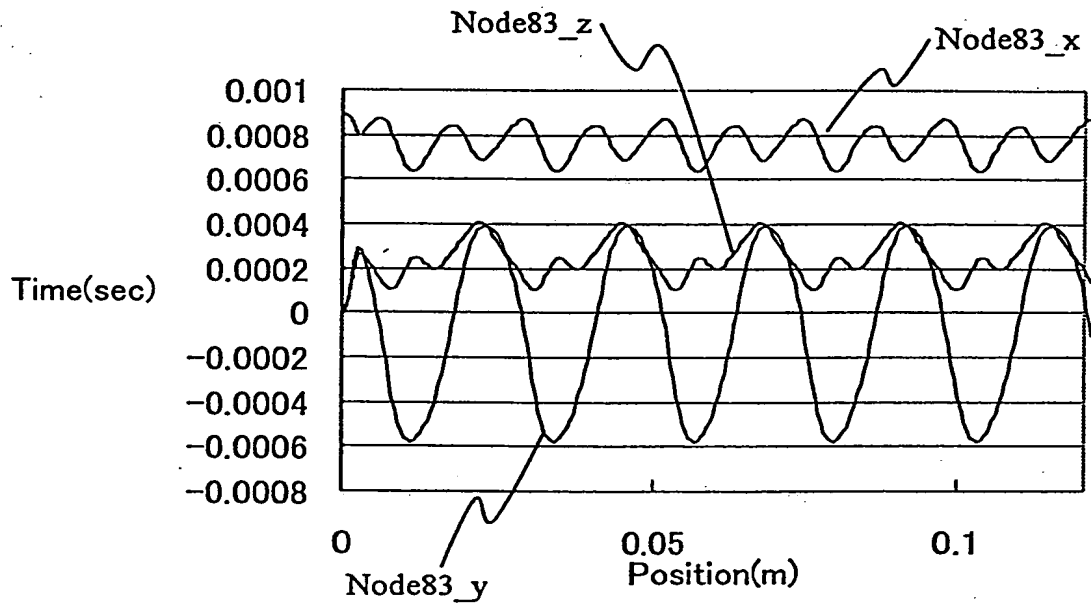


FIG.36

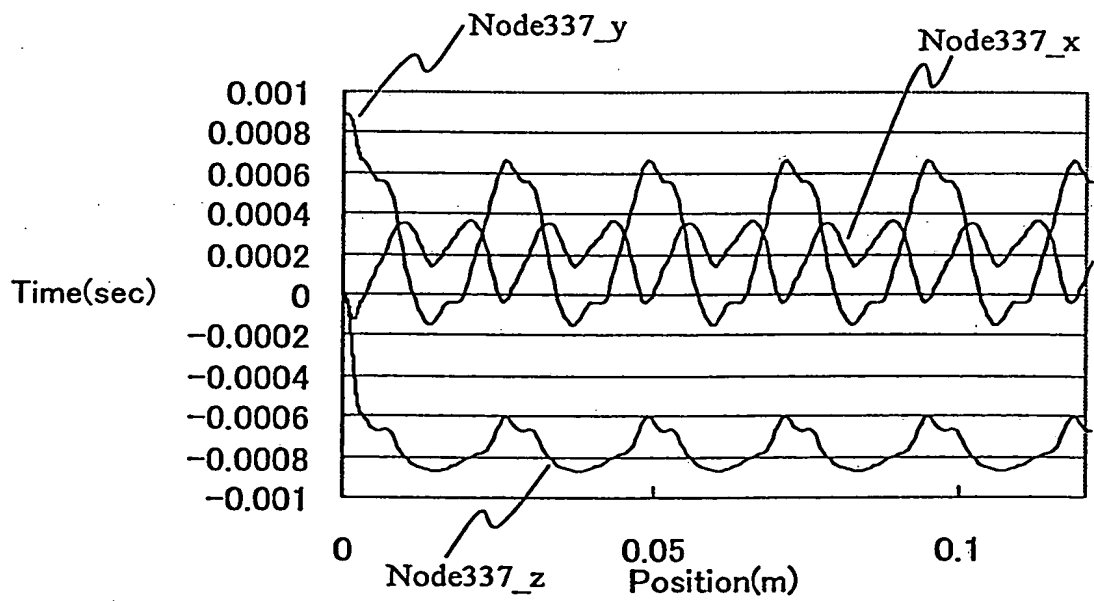


FIG.37

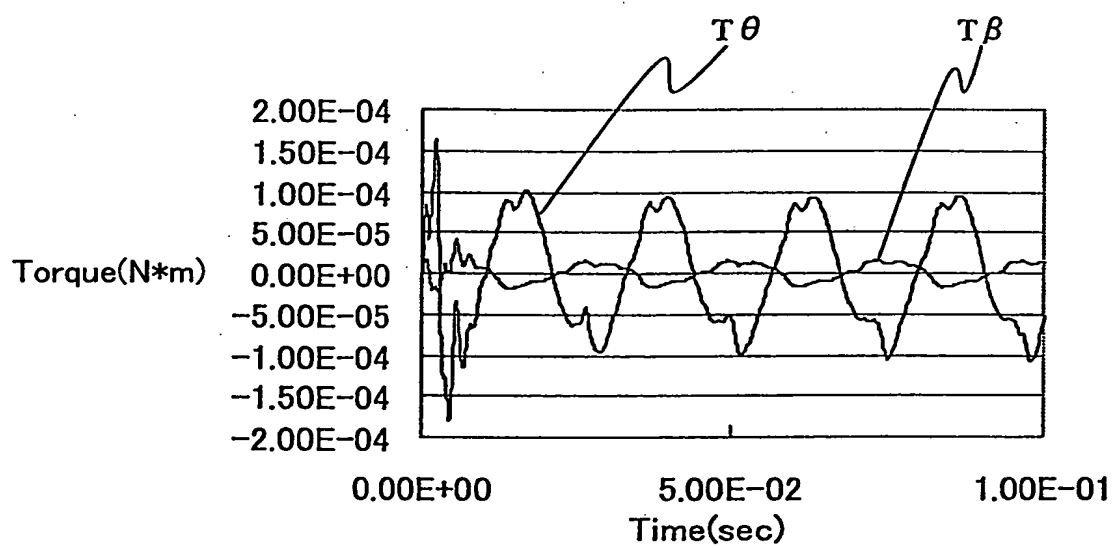


FIG.38

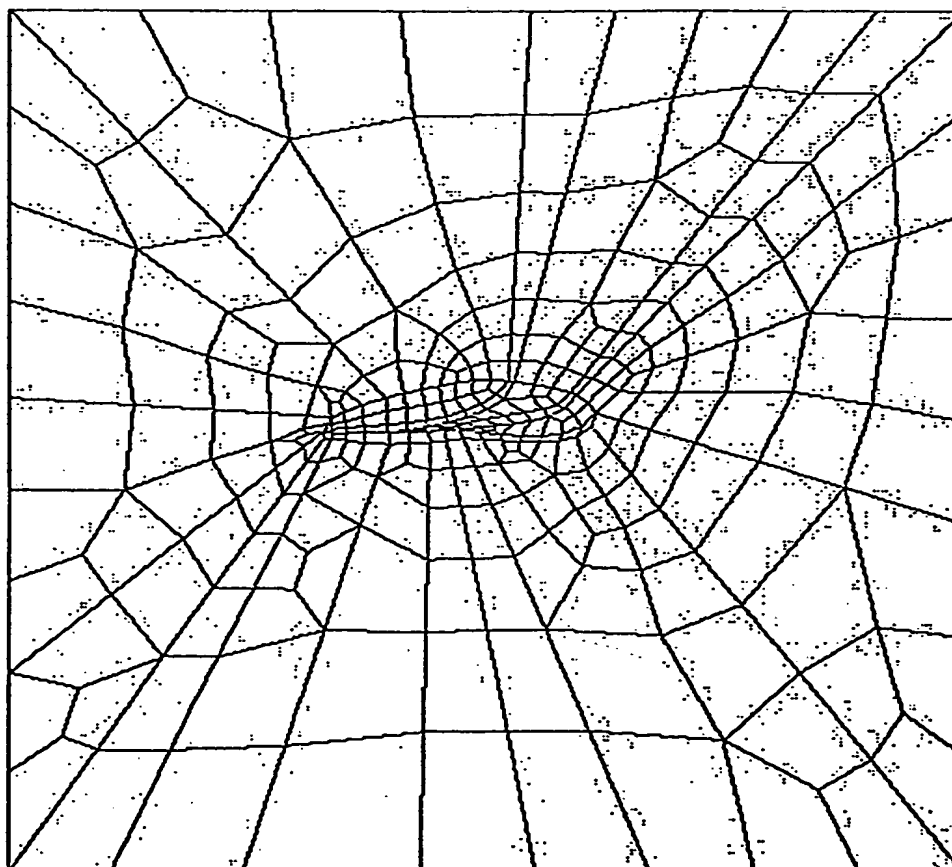


FIG.39

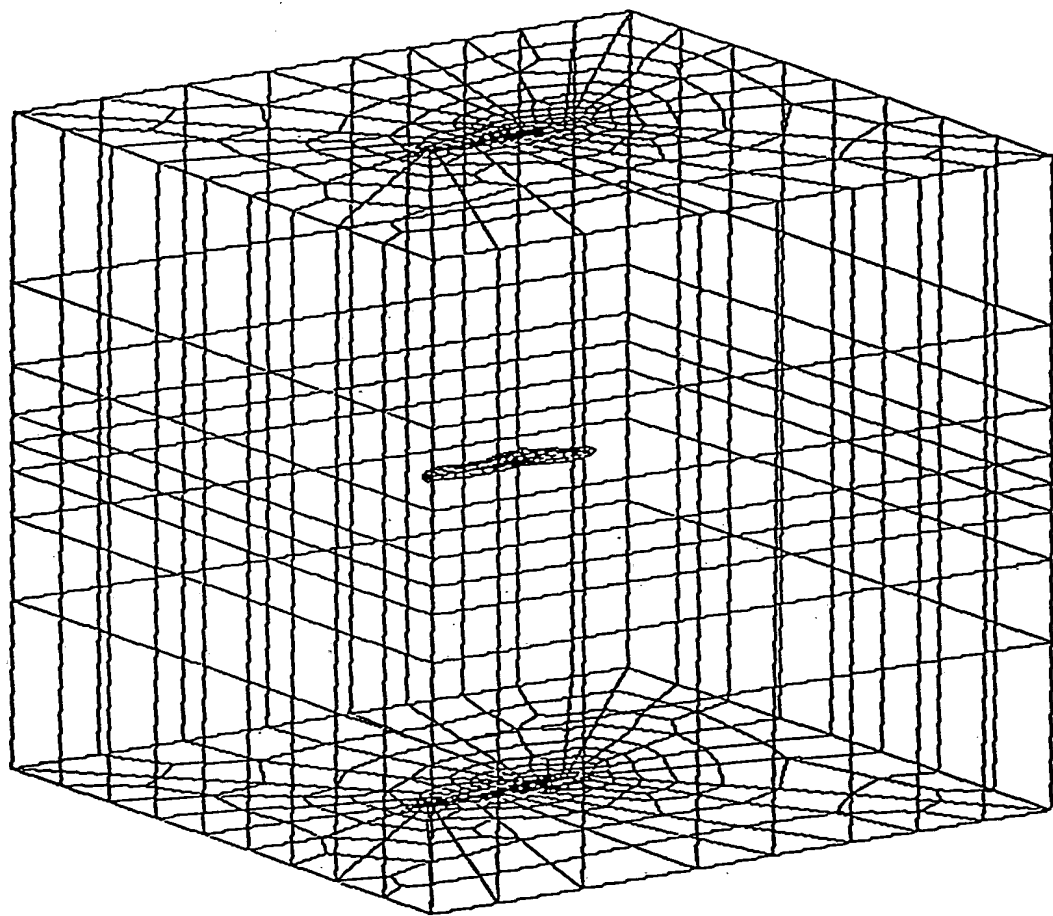


FIG.40

VERTICAL COMPONENT OF
FULCRUM REACTION(N)

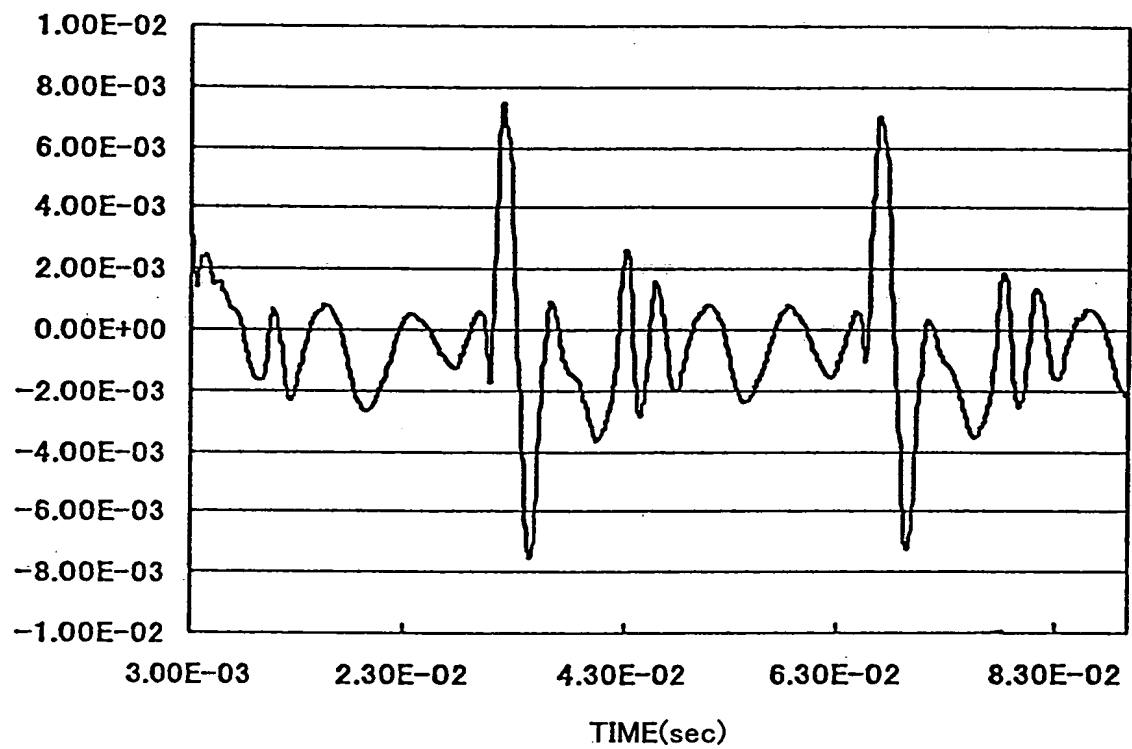


FIG.41

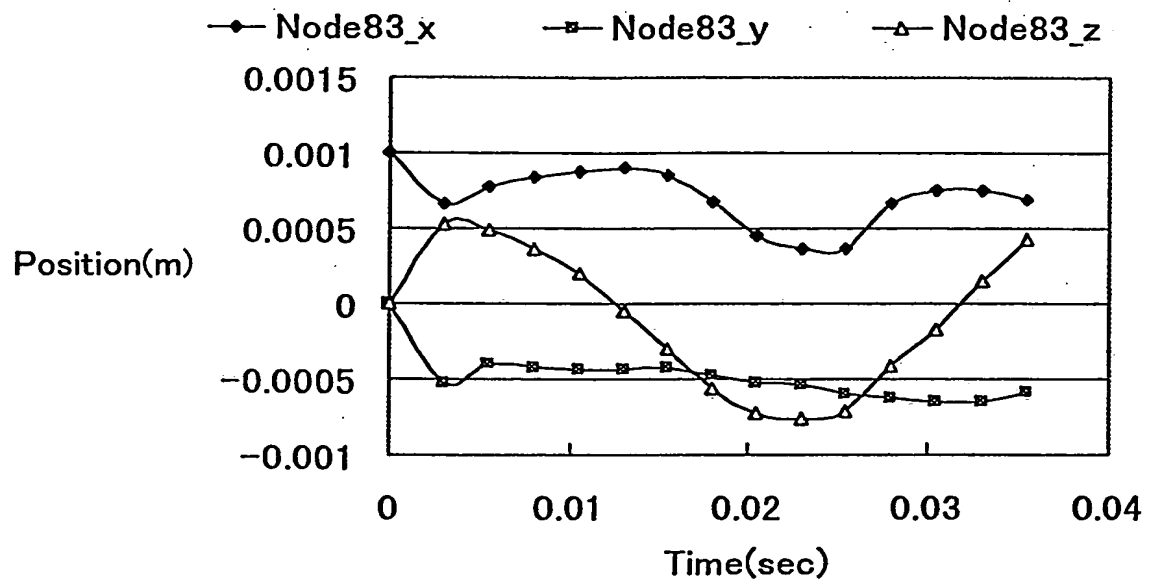


FIG.42

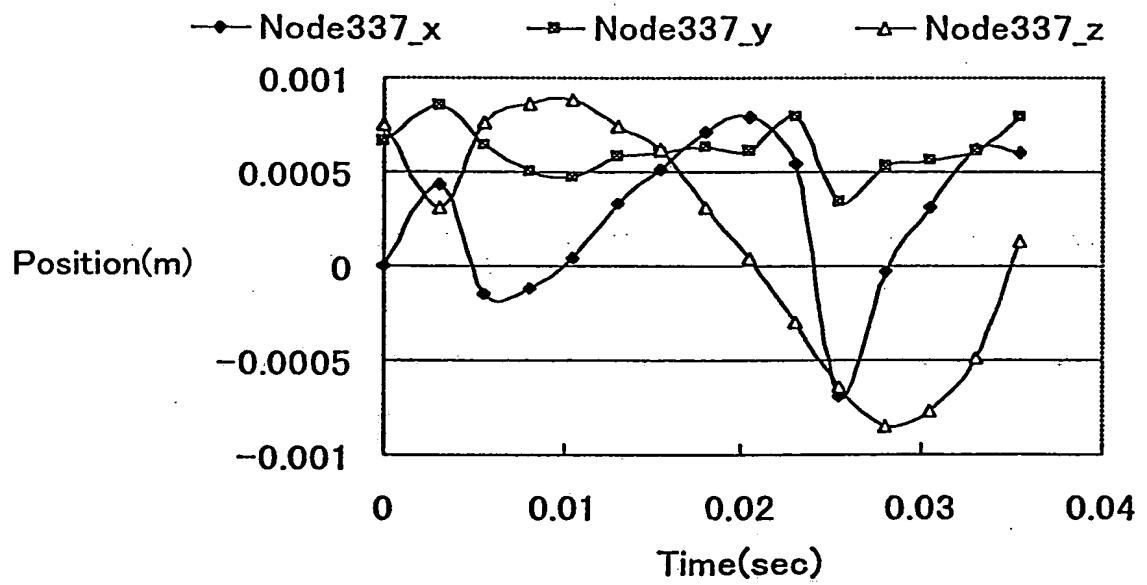


FIG.43

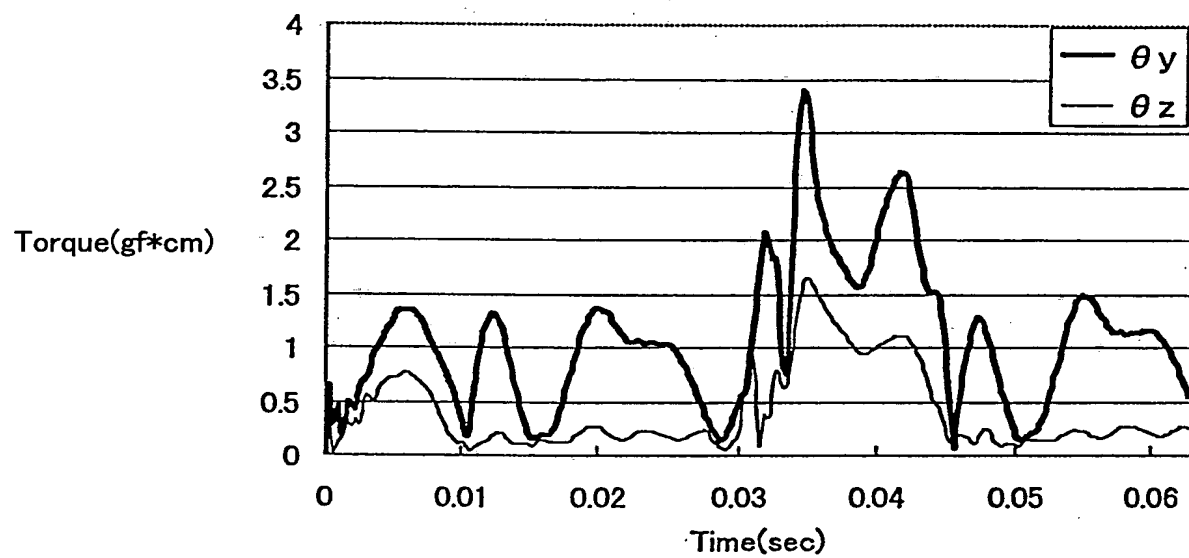


FIG.44

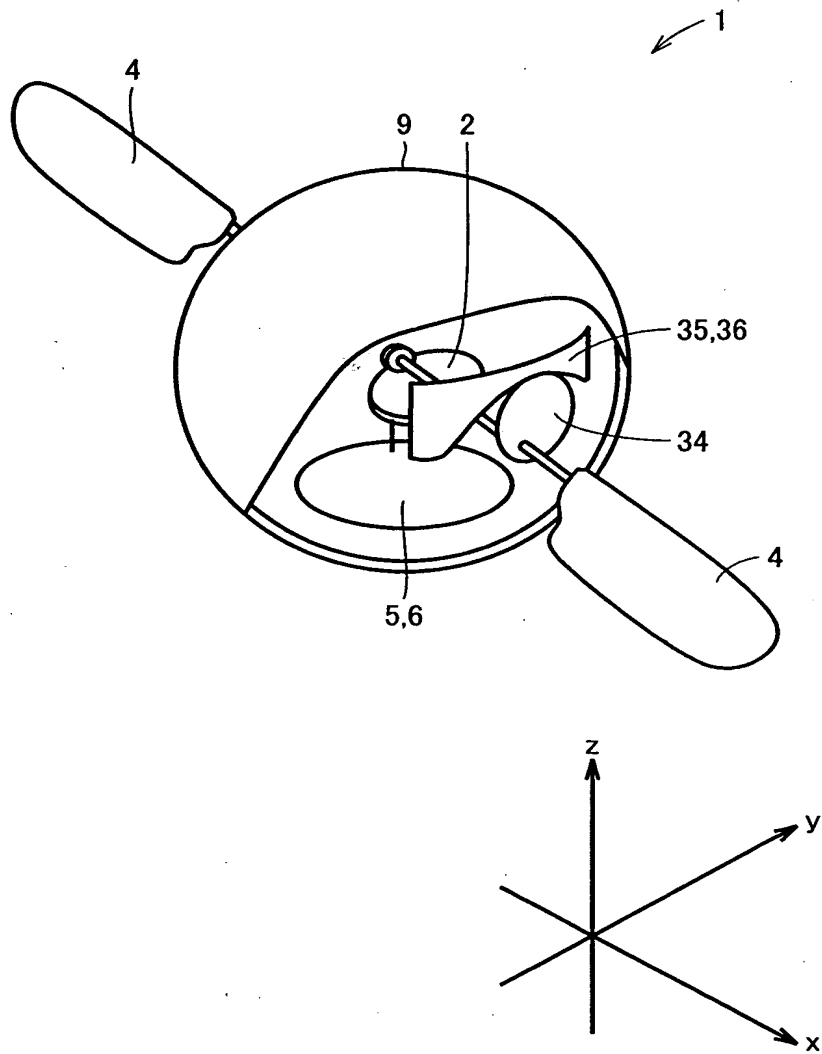


FIG.45

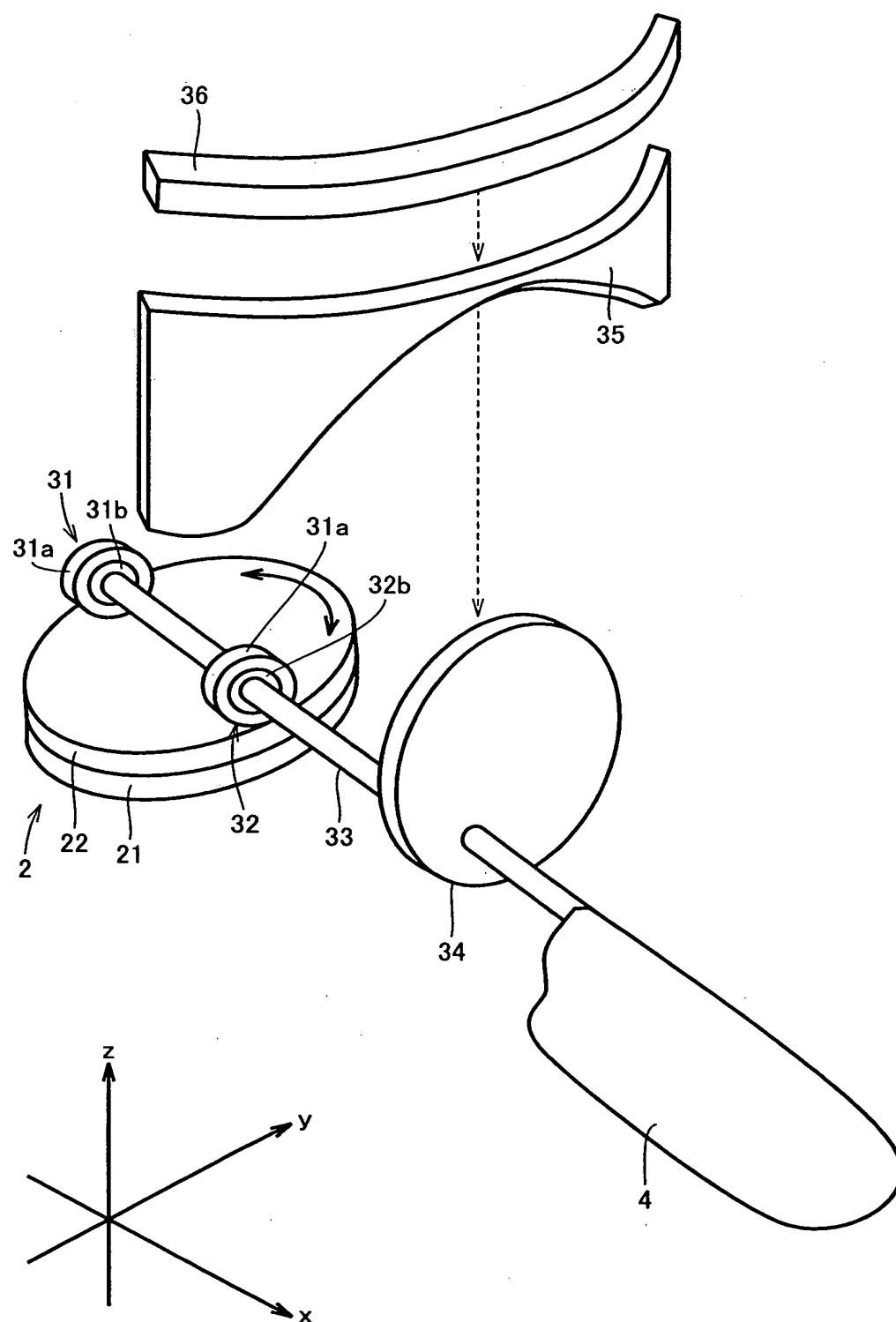


FIG.46

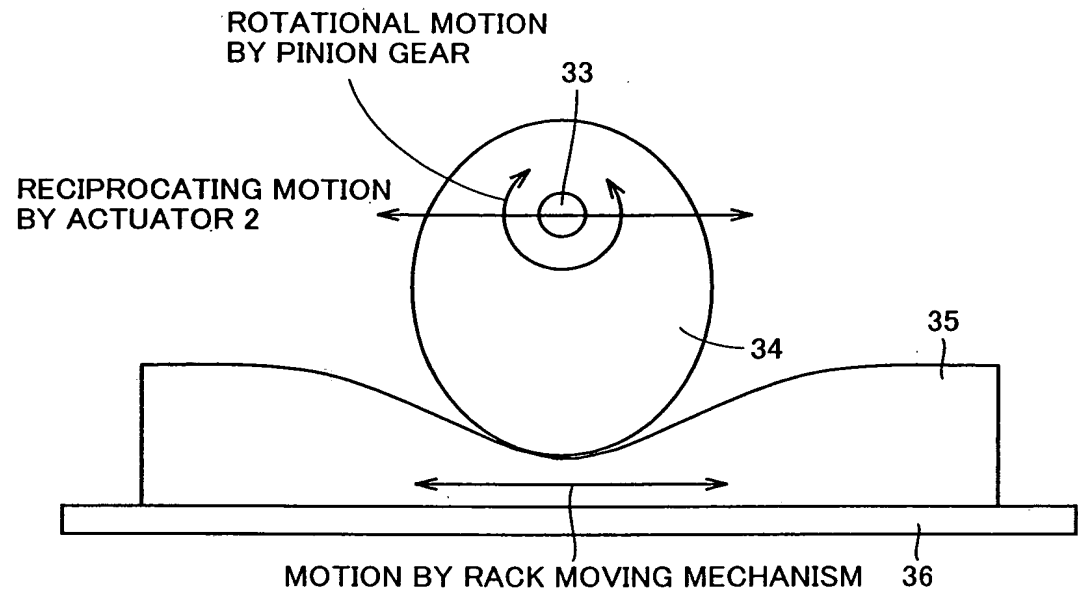


FIG.47

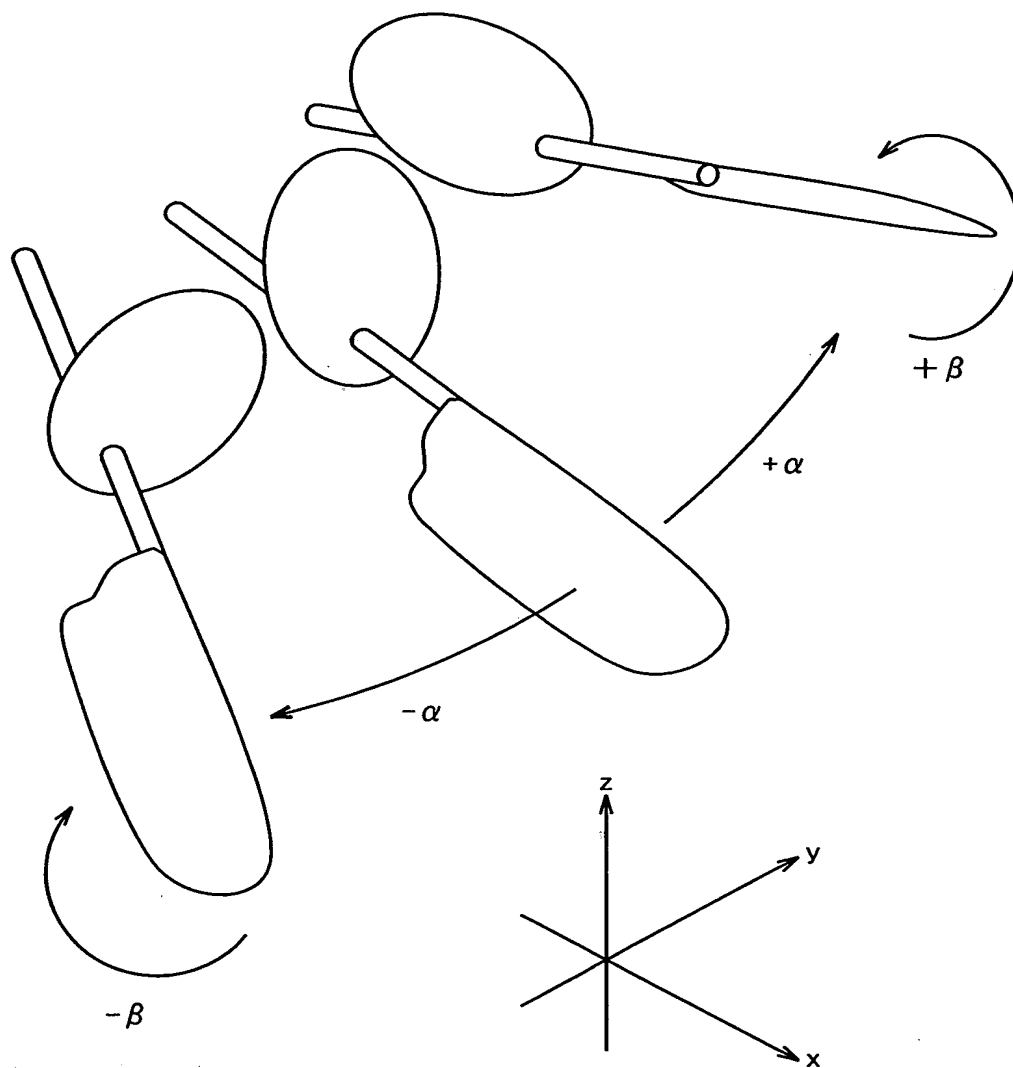


FIG.48

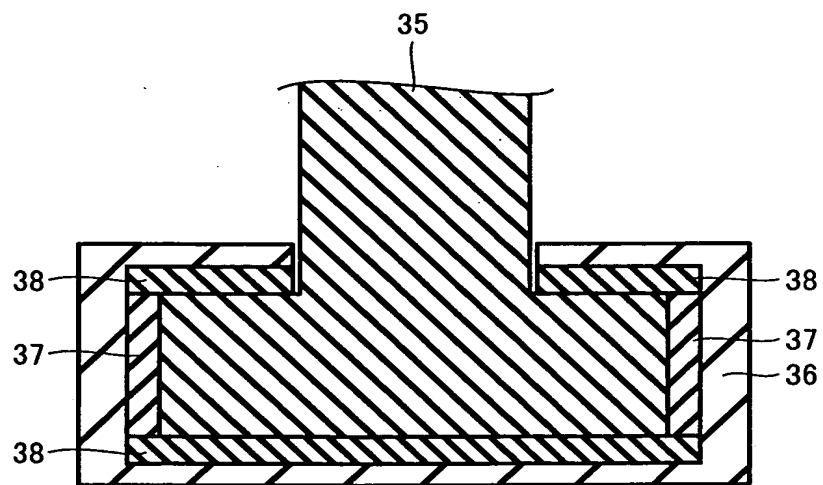


FIG.49

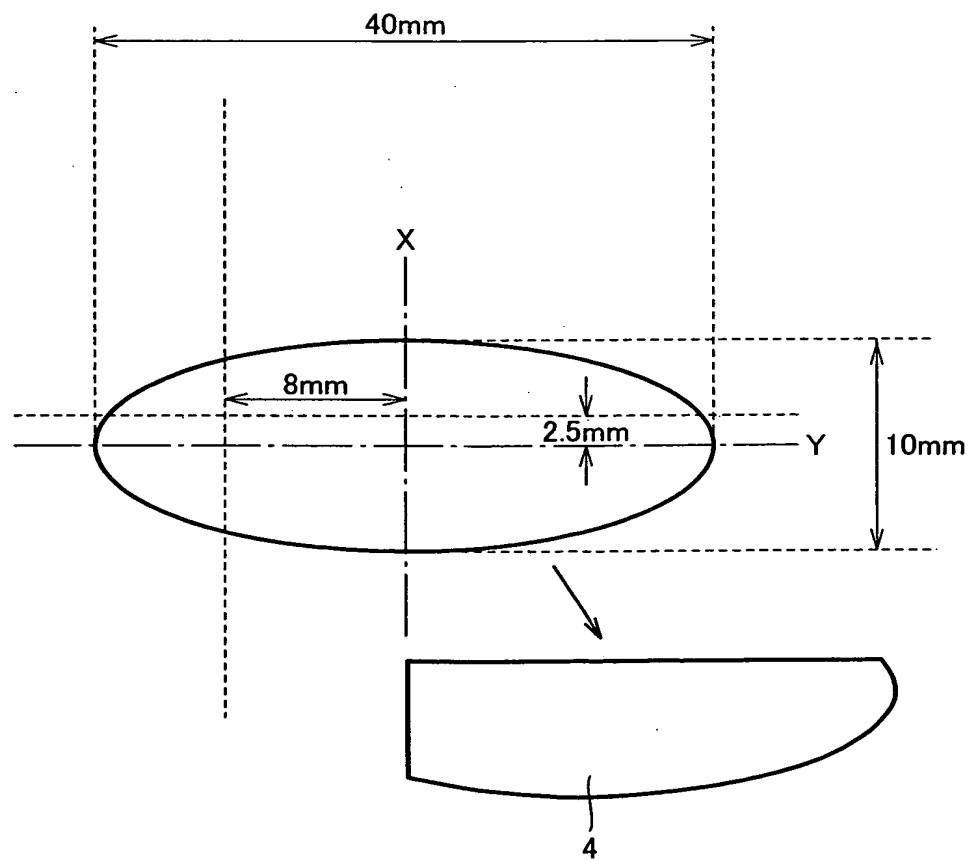


FIG.50

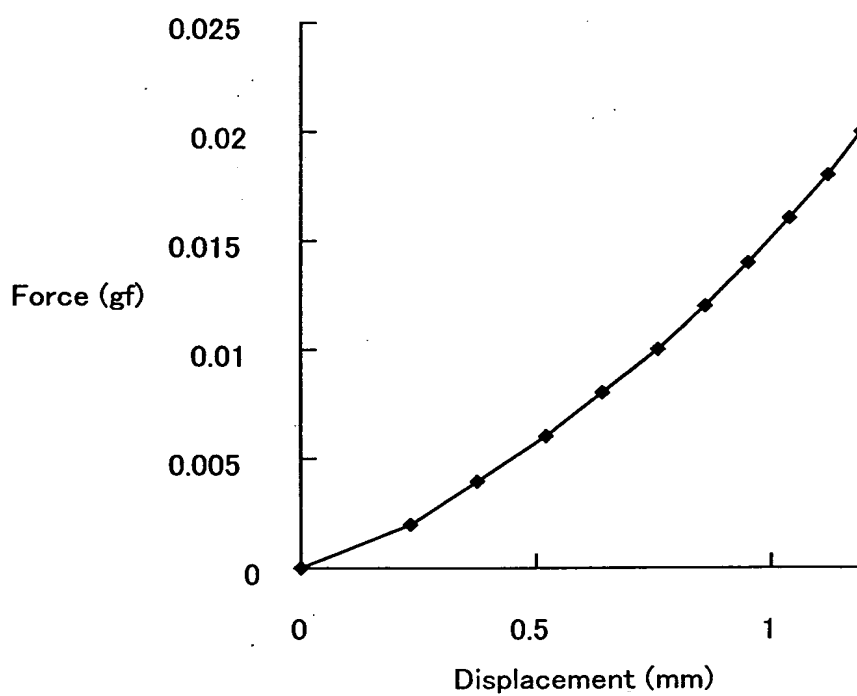


FIG.51

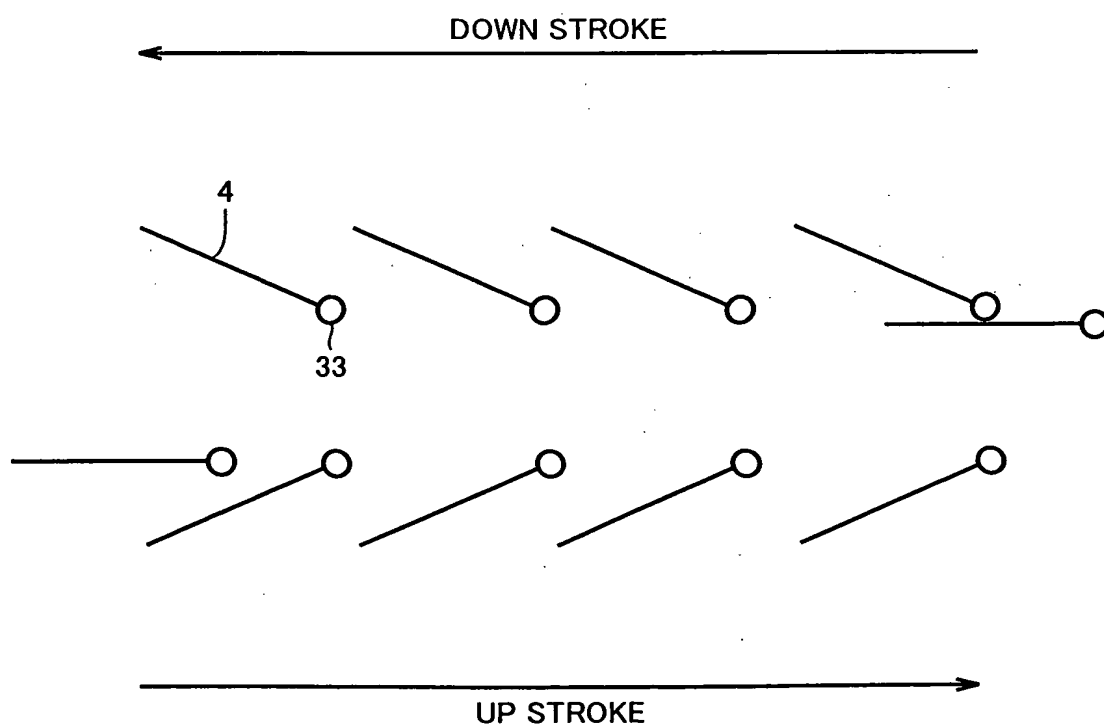


FIG.52

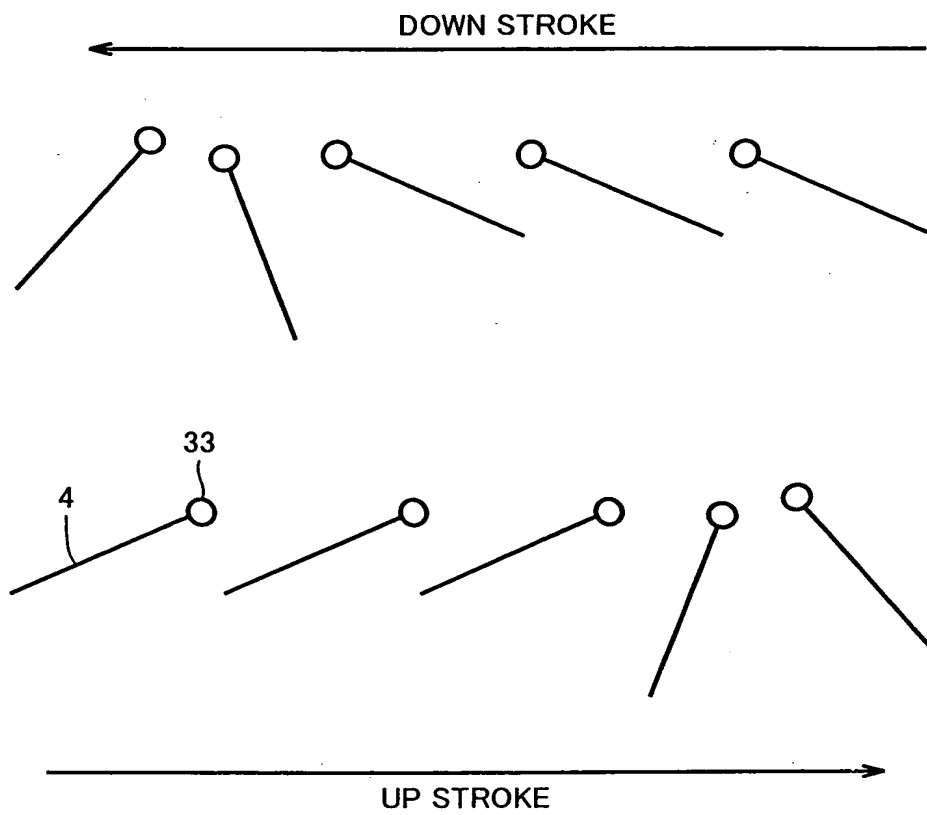


FIG.53

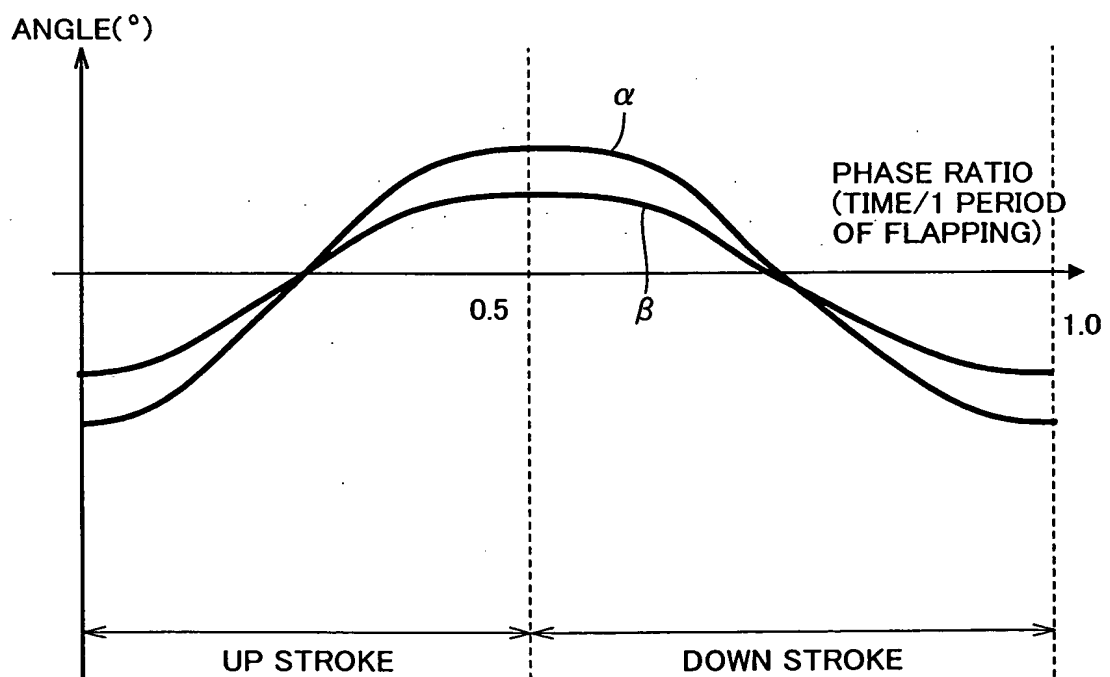


FIG.54

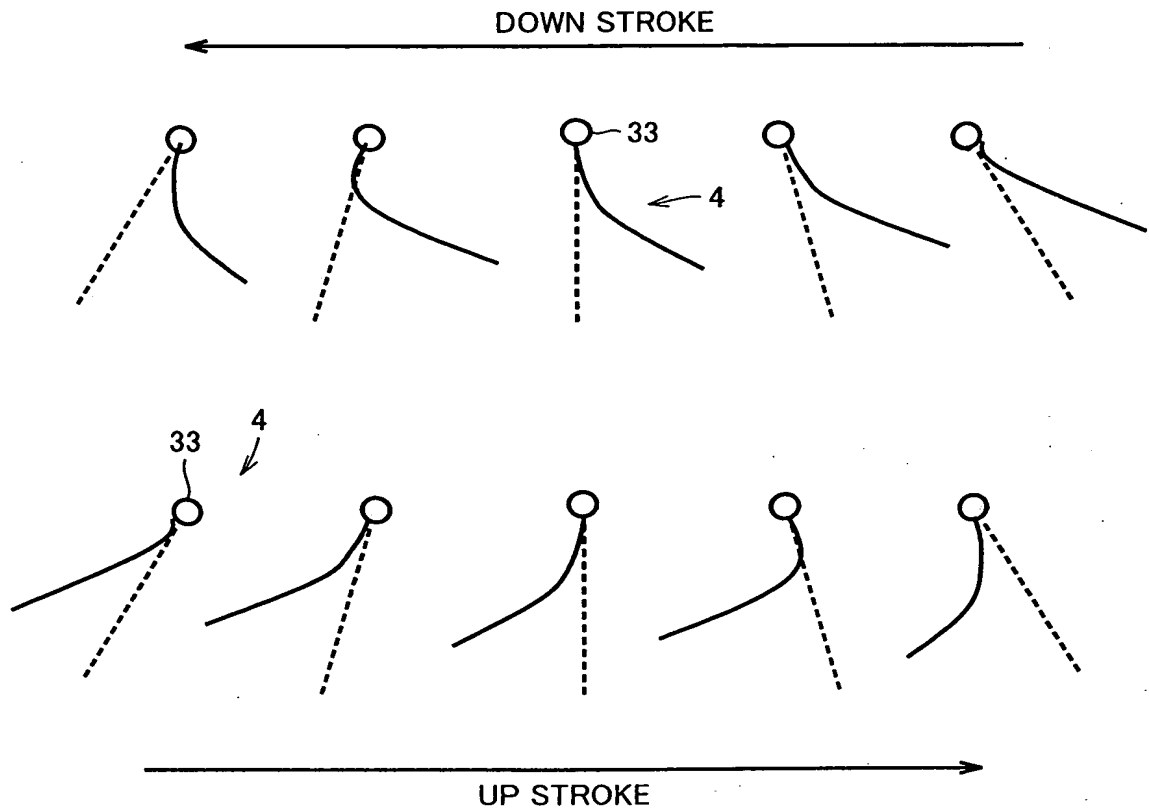


FIG.55

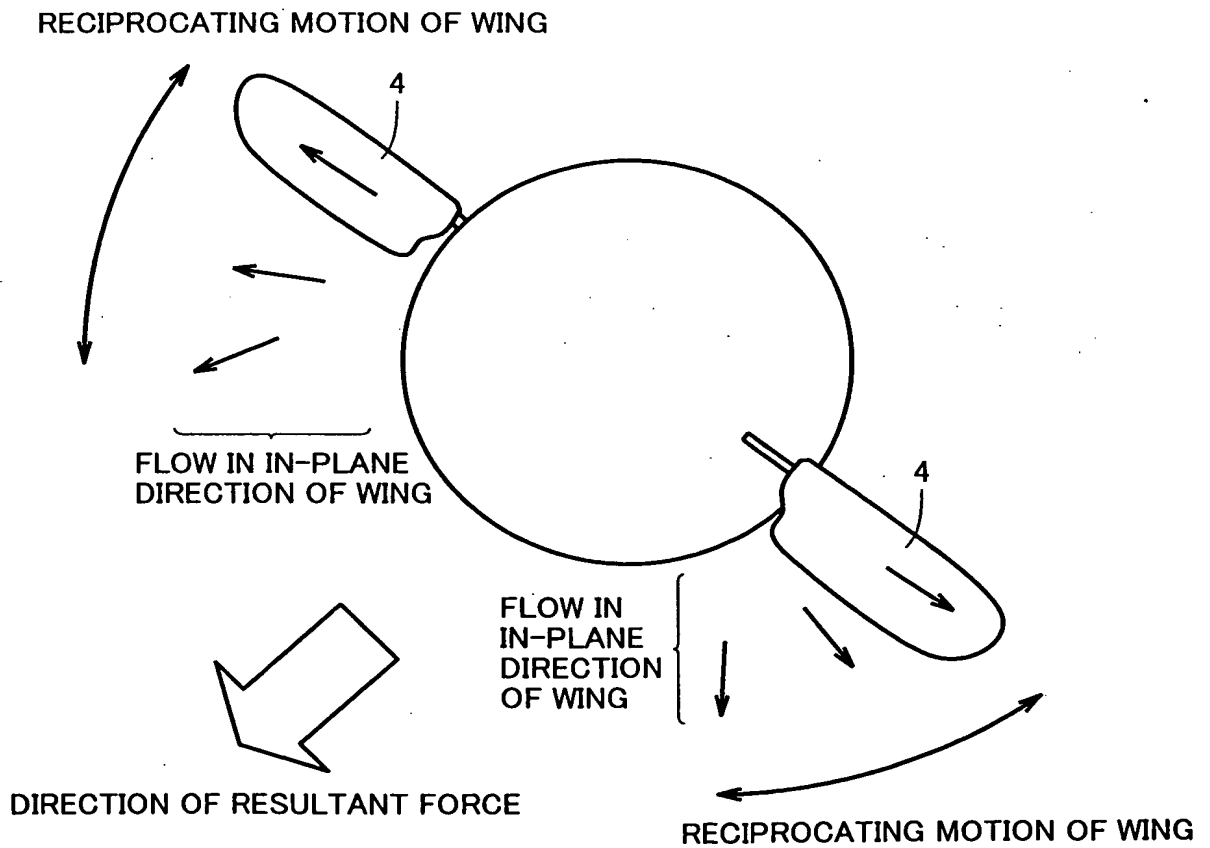


FIG.56

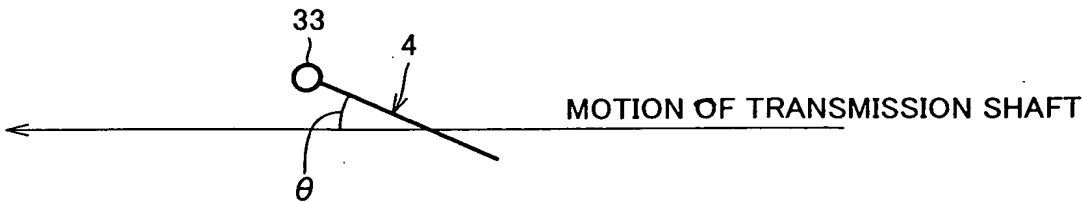


FIG57

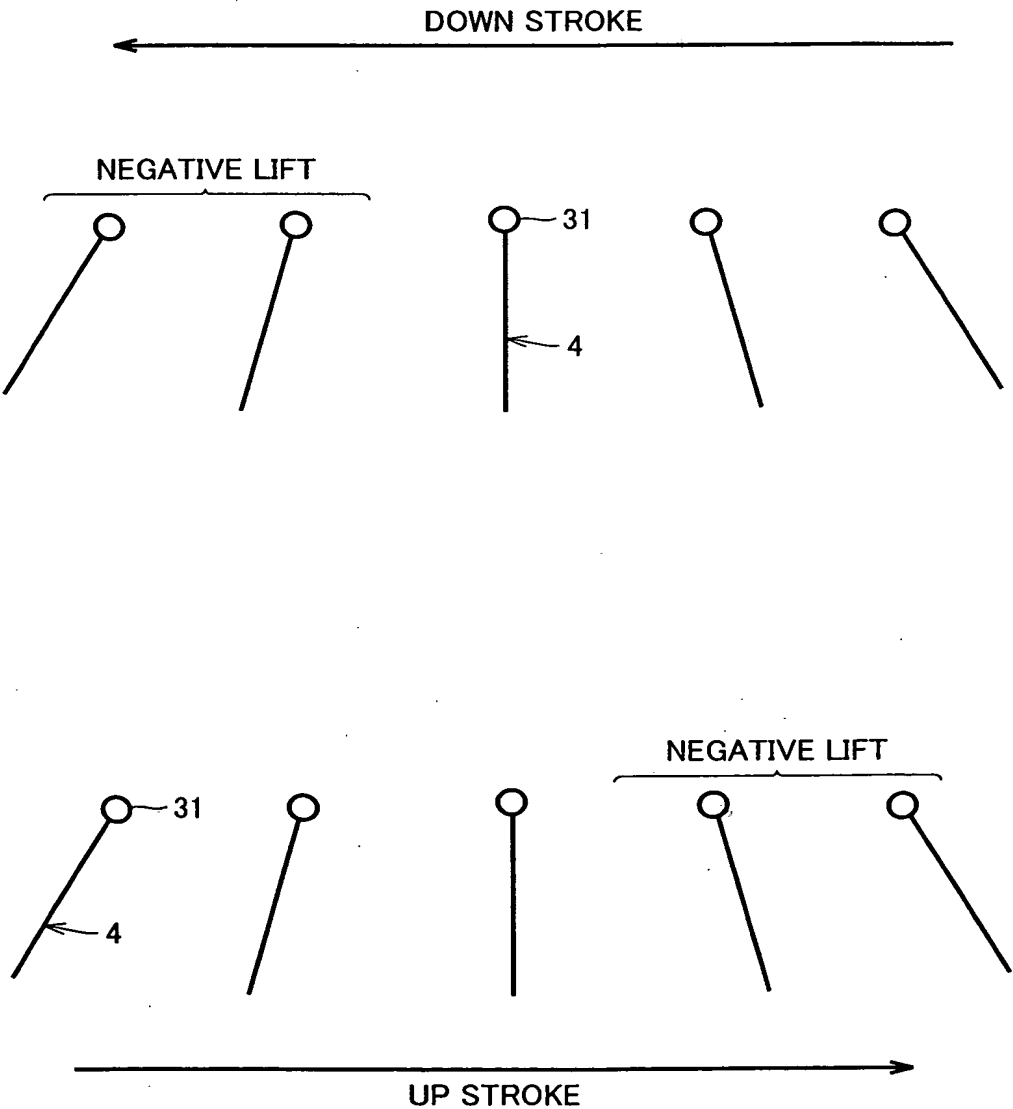


FIG.58

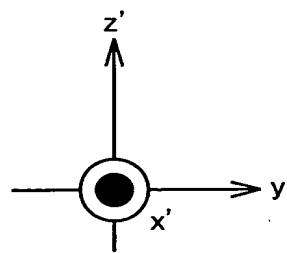
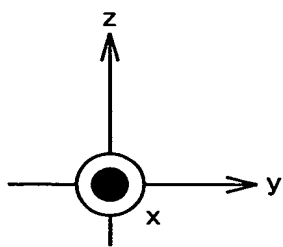
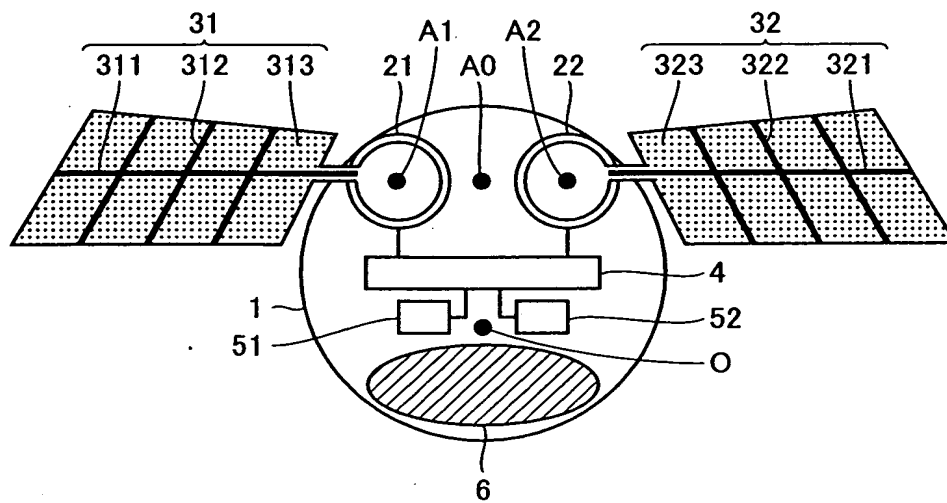


FIG.59

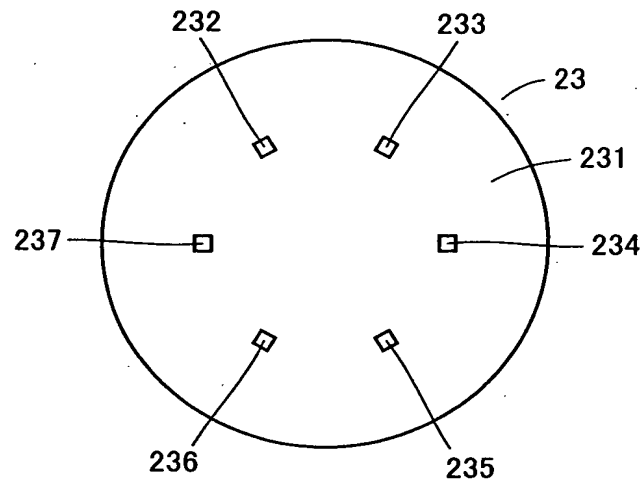


FIG.60

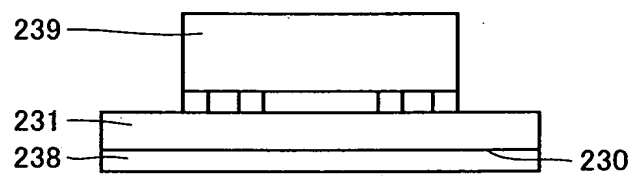


FIG.61

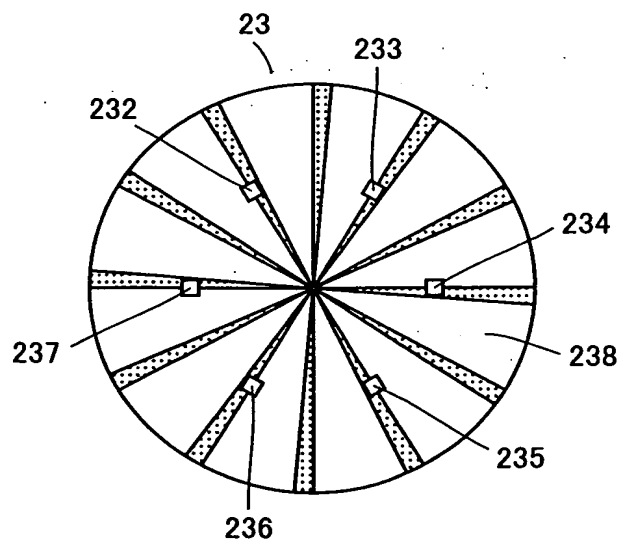


FIG.62

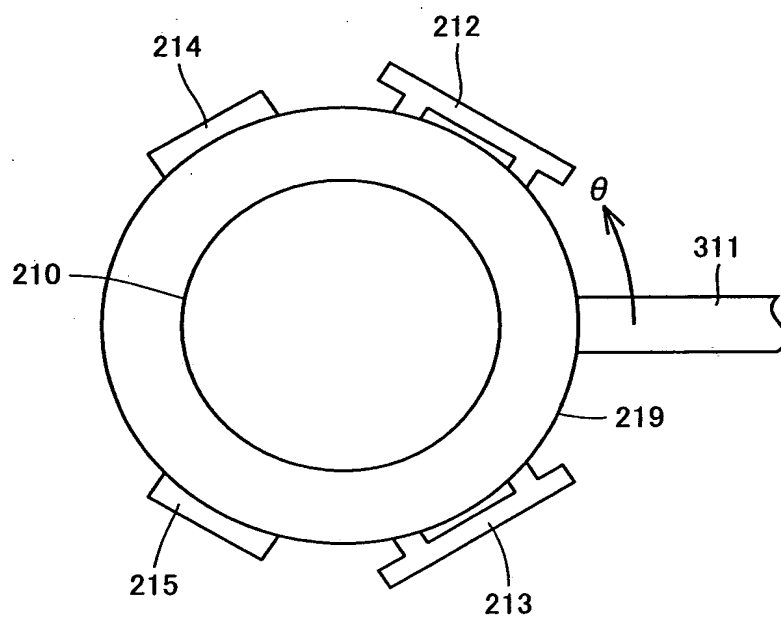


FIG.63

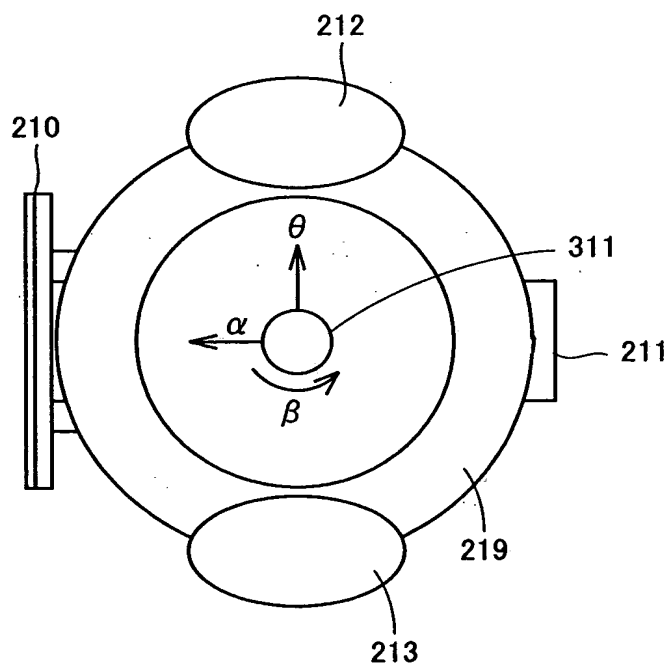


FIG.64

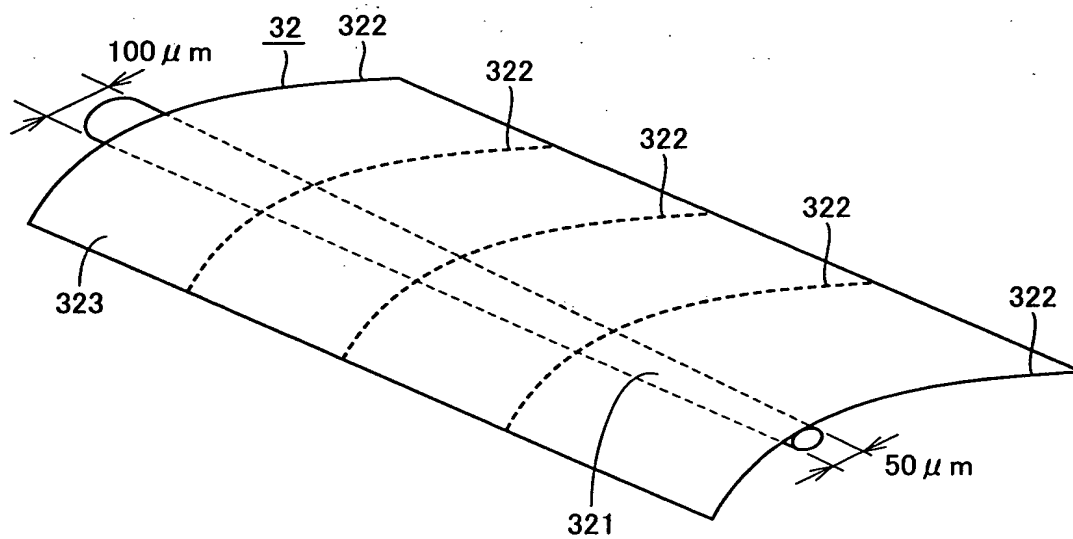


FIG.65

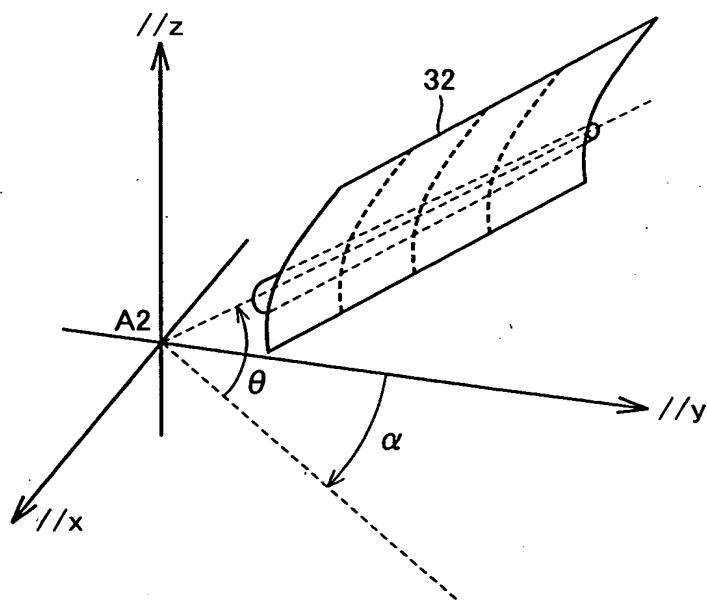


FIG.66

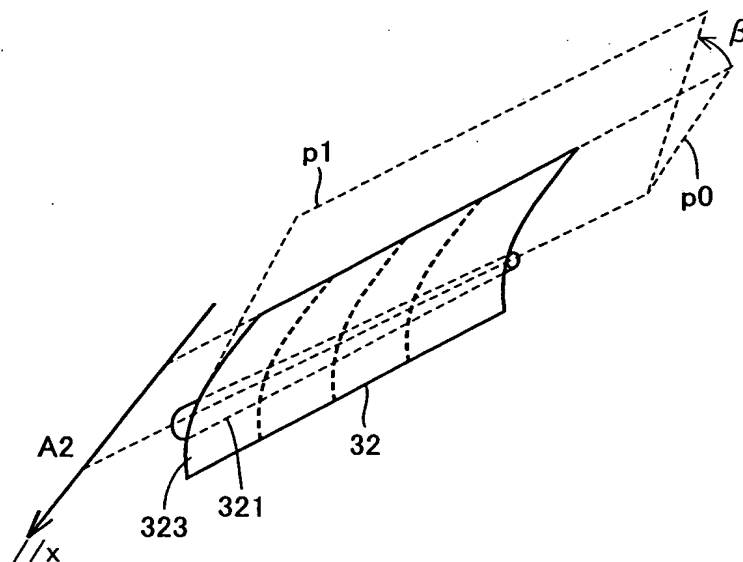


FIG.67

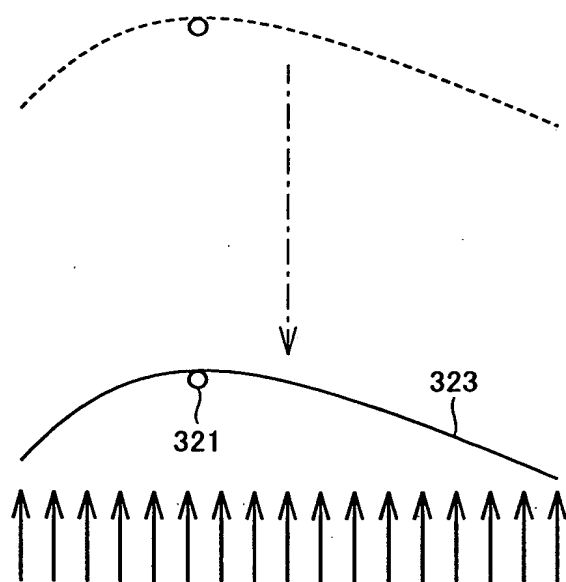


FIG.68

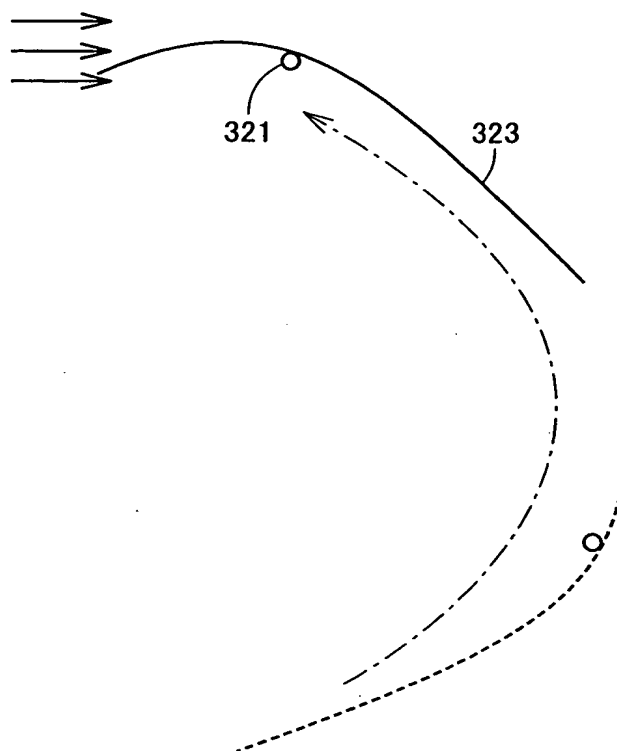


FIG.69

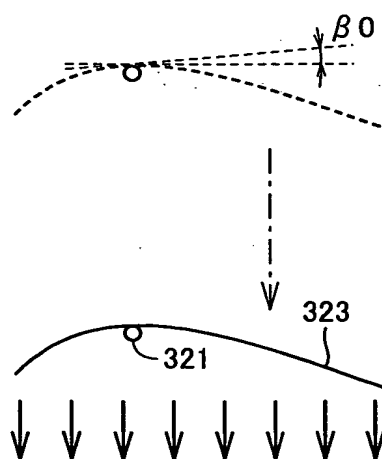


FIG.70

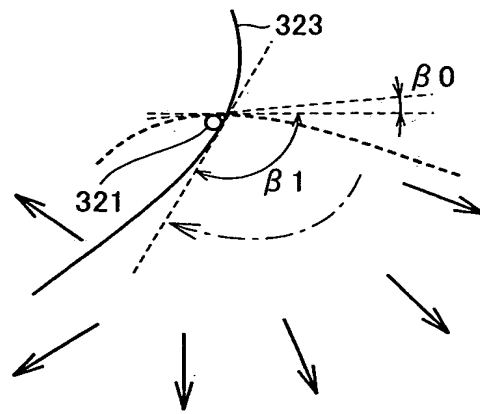


FIG.71

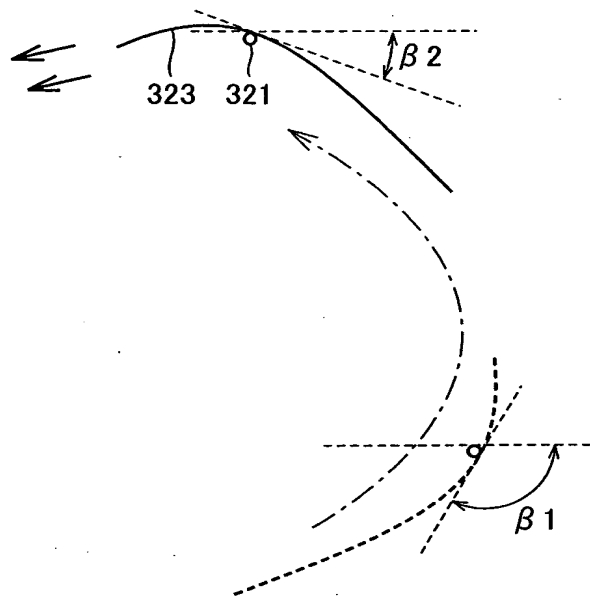


FIG.72

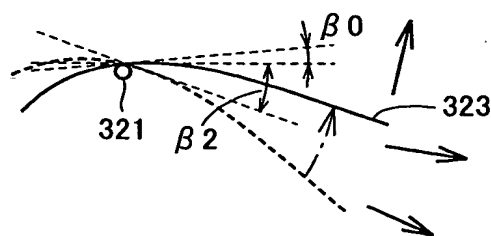


FIG.73

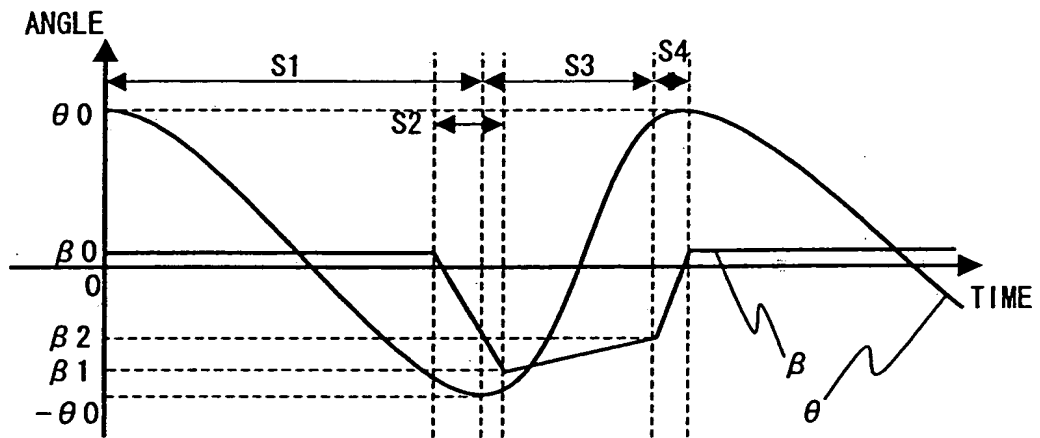


FIG.74

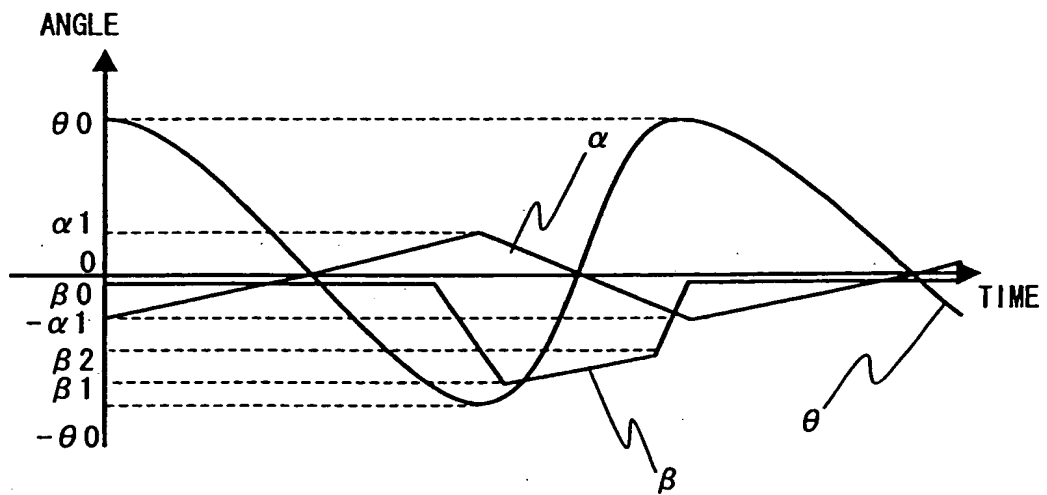


FIG.75

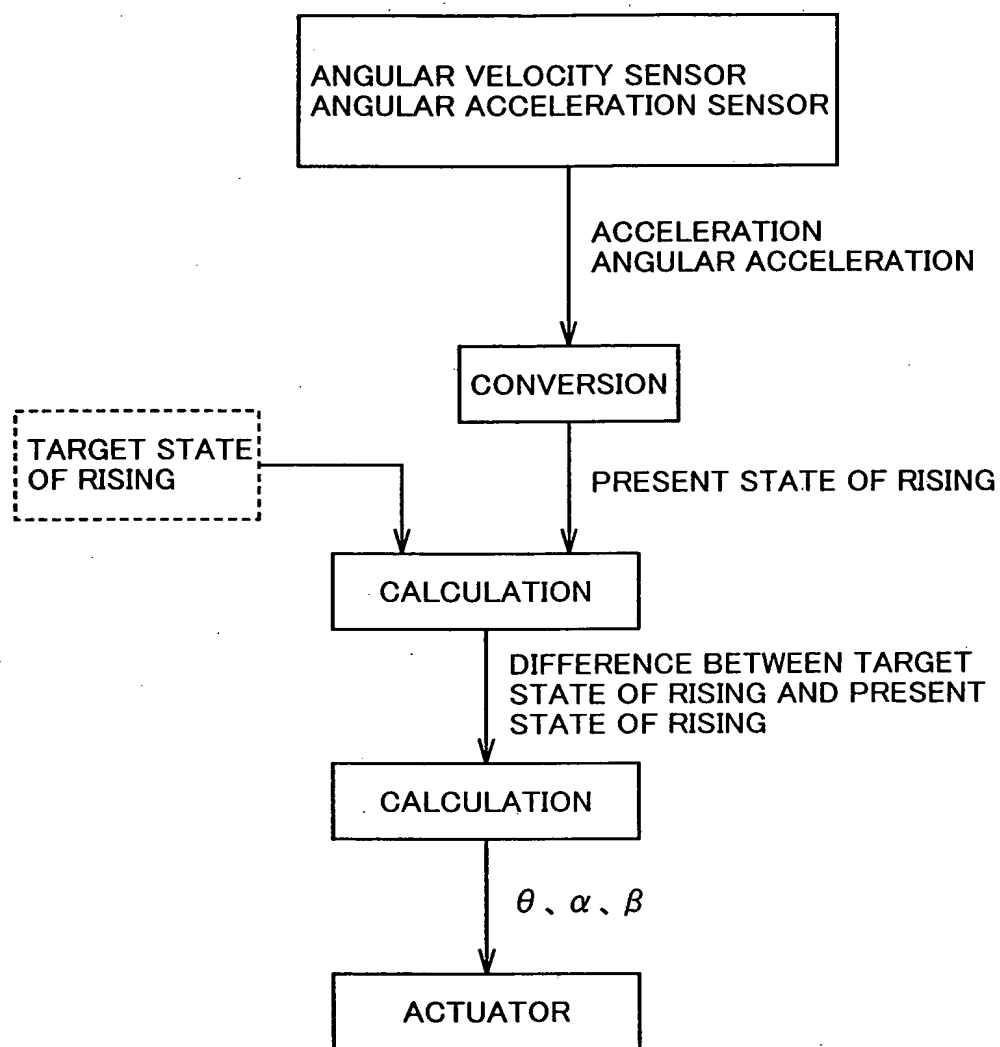


FIG.76

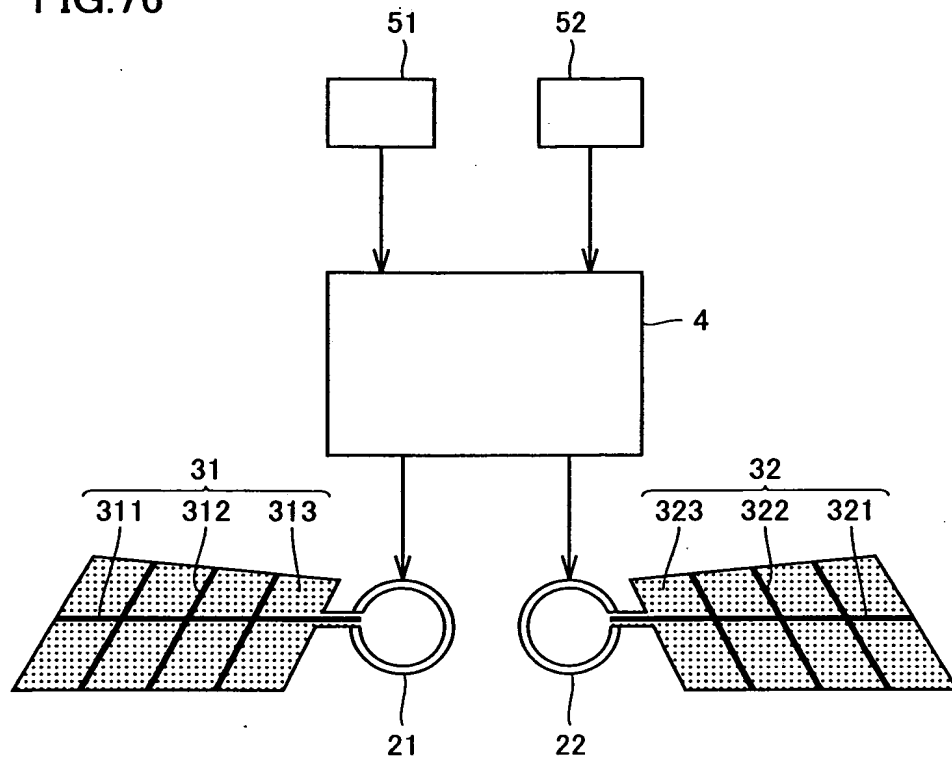


FIG.77

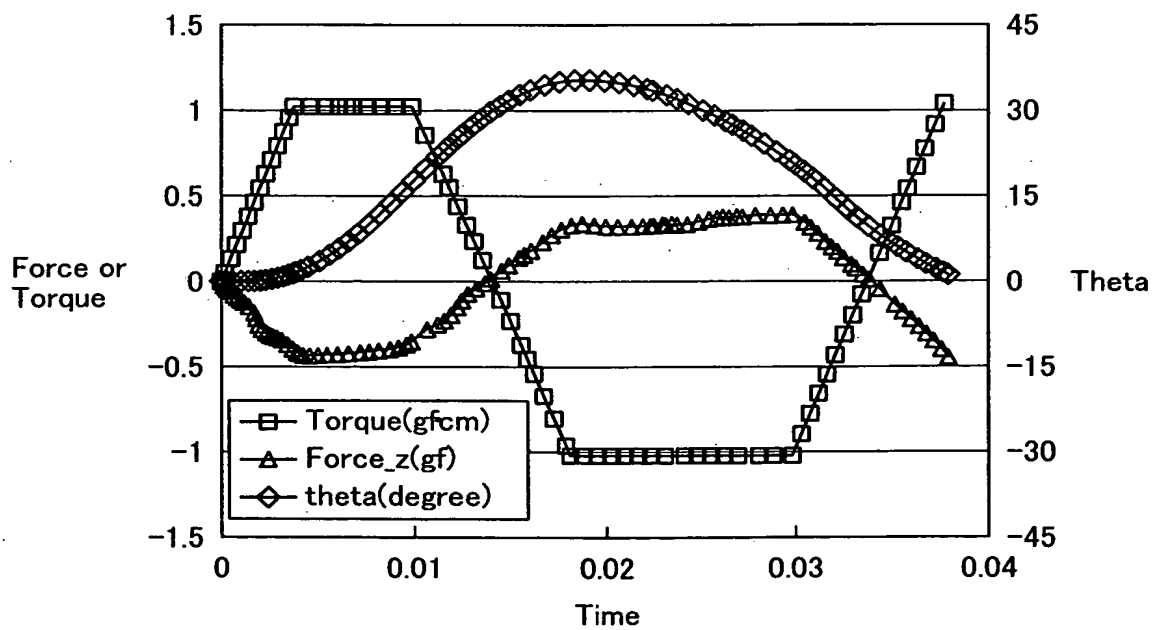


FIG.78

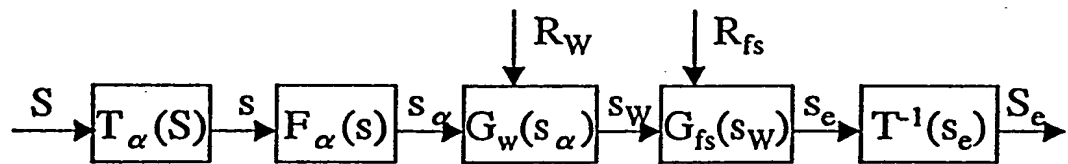


FIG.79

		$x''+$	$x''-$	$z''+$	$z''-$	$\theta y''+$	$\theta y''-$
S1	θ amplitude large			●			
	θ amplitude small				●		
	$-d\theta/dt$ large			●			
	$-d\theta/dt$ small				●		
	$-d\alpha/d\theta > d\alpha_{th}$	●					
	$-d\alpha/d\theta < d\alpha_{th}$		●				
	β is vertical to down stroke direction			●			
	β is not vertical to down stroke direction				●		
	$\beta > 0$	●					
	$\beta < 0$		●				
S2	$-d\beta/dt$ large	●		●		●	
	$-d\beta/dt$ small		●		●		●
S3	θ amplitude large				●		
	θ amplitude small			●			
	$d\theta/dt$ large				●		
	$d\theta/dt$ small			●			
	$d\alpha/d\theta > d\alpha_{th}$		●				
	$d\alpha/d\theta < d\alpha_{th}$	●					
	β is vertical to up stroke direction				●		
	β is not vertical to up stroke direction			●			
S4	$d\beta/dt$ large	●			●		●
	$d\beta/dt$ small		●	●		●	

FIG.80

	RIGHT ACTUATOR		LEFT ACTUATOR	
	DRIVING FRQ.	FLAPPING	DRIVING FRQ.	FLAPPING
UP	35 Hz	B	35 Hz	B
DOWN	25 HZ	B	25 Hz	B
GO FORWARD	30 HZ	A	30 Hz	A
HOVER	30 HZ	B	30 Hz	B
TURN RIGHT	30 HZ	B	30 Hz	A
TURN LEFT	30 HZ	A	30 Hz	B